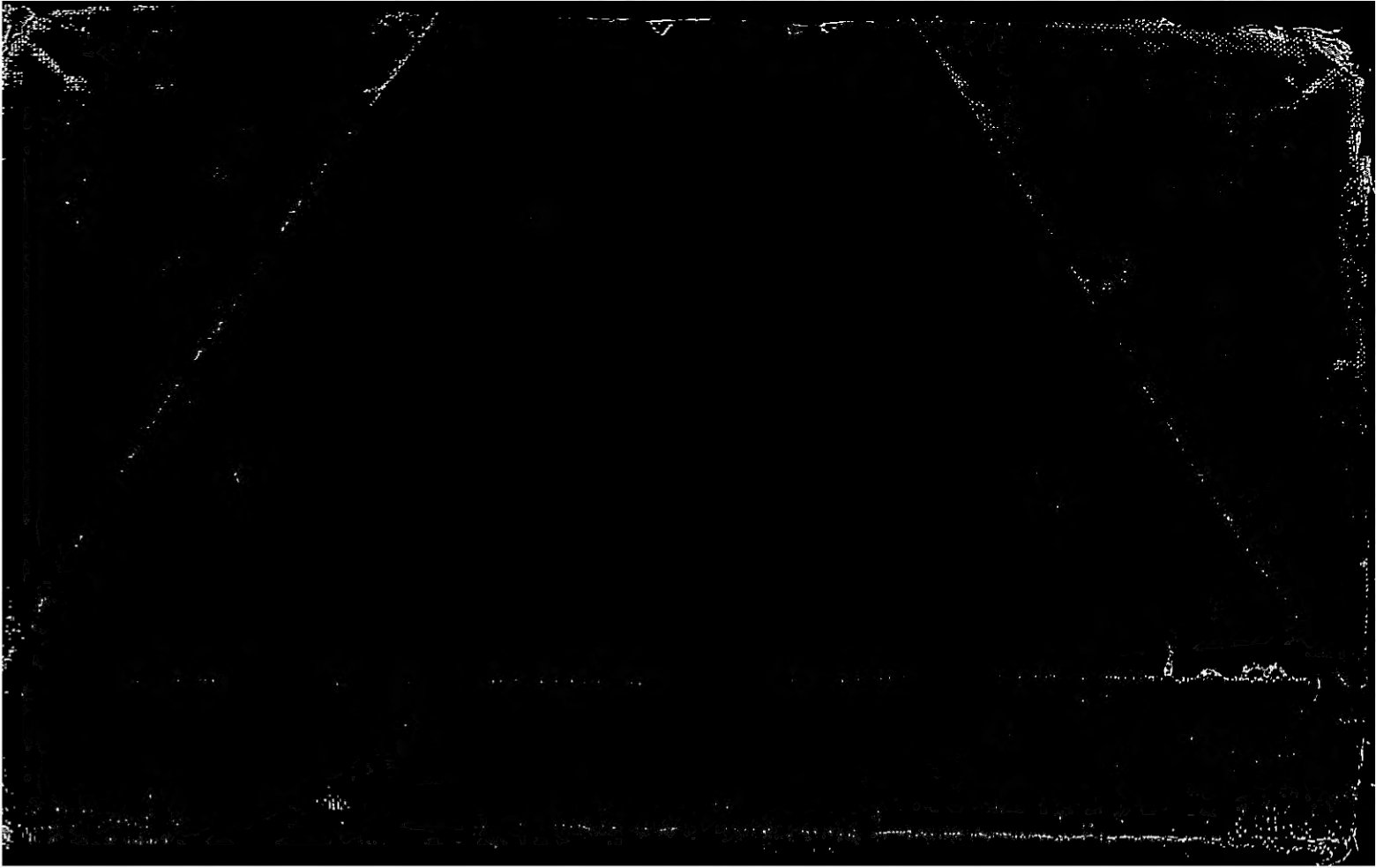

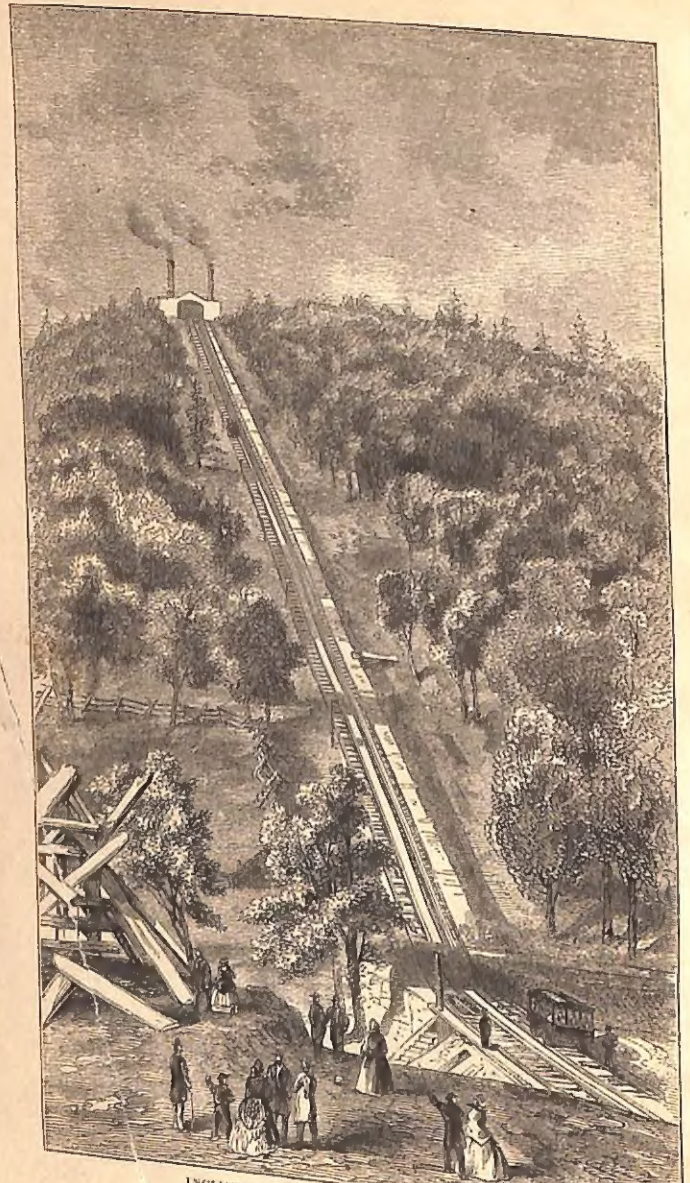

INCLINED PLANE UP MOUNT PISGAH.

[See p. 101.

GUIDE-BOOK

OF THE

CENTRAL RAILROAD

OF

NEW JERSEY,

AND

ITS CONNECTIONS THROUGH

THE COAL-FIELDS OF PENNSYLVANIA.

NEW YORK:
HARPER & BROTHERS, PUBLISHERS,
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1864.

ILLUSTRATIONS.

ILLUSTRATED GUIDE-BOOK

OF THE

CENTRAL RAILROAD OF NEW JERSEY.

I.

INTRODUCTION.

The time has gone by when it could be said of any country that its sea-board cities must of necessity hold a monopoly of its grandeur. This is due to railroads, which have relieved inland towns, and even the tiniest villages, from their former servile dependence upon the cities of the coast, and established between the sea and the land a complex universal system of mutual ministration. On this account, there seems to be a decidedly *democratic* feature about railroads, as indeed there is about every improvement of modern civilization. Metropolitan cities are not made less, but the whole country is brought up to their level. Inland towns and villages already existing have opened up to them a thousand avenues of prosperity from which they must else have been excluded; and, besides this, numbers are tempted into existence, until the country is densely populated with happy communities.

In a country so vast as our own, these considerations have an especial weight. Literally it is true that the velocity of steam is imparted to the progressive move-

ment of this generation. All speed—moral, intellectual, physical—takes its gradation from that which is possible in locomotion; and it must be so. Our three and a quarter millions of acres have only four and a half thousands of miles of coast. Now, as matters were carried on anciently, it would have taken a thousand years simply to colonize this outer rim of the United States, while the vast interior would have remained thousands of years more in its wilderness state. It is the steam-whistle that has cut down the forest trees, that has opened the coal mines of Pennsylvania, that has plowed the limitless garden of the West, that has unveiled the natural resources of every portion of the country, that has given it its thirty millions of people, and that has hurried on to maturity its political crises and revolutions; and all this not quite two centuries and a half after the landing of the Puritans at Plymouth! A locomotive will not move with a bad idea behind it, but put a good one there, and all the powers of evil, all the impediments of nature, can not hinder its onward course. It was commerce that destroyed the feudal system of the fifteenth century, and the power of steam is now sweeping away every vestige of the barbarism of this nineteenth century. Establish an intimate system of commercial communication between the East and the West, and between the North and the South, and it is inevitable that the whole country must rise to a level with whatever portion of it is most highly civilized and enlightened. This must be the material basis of any union between the states that shall have permanent value.

But the work that has been begun by railroads in this country has been only just begun. The future it is impossible not to contemplate with audacity. The tourist of to-day finds his entire route lined with little villages, the greater part of which have not yet seen six years. The beauties which strike the eye are furnished by the

hand of Nature, and are rarely connected with the more mature products of human art—such, for instance, as are afforded by the architecture of long-standing cities. But in one or two generations mighty strides will have been taken by human art; instead of incipient villages, the tourist will on all sides behold flourishing cities, with their rich and beautiful surroundings. Then it will not be alone the stately river, the cleft mountain—not alone the tunnel and viaduct that shall arrest his attention, but also the picturesque canton, the finely and tastefully constructed street, and the stately memorials of historic events, transcending in interest the heroic deeds of the Revolution, or the bloody episodes of early Indian warfare.

II.

HISTORICAL SKETCH OF THE ROAD AND ITS CONNECTIONS.

THE Central Railroad of New Jersey, besides being the principal avenue by which the products of Pennsylvania are conveyed to New York, is also one of the most important routes to the West. Doubtless there is not a single road in the country which, in the two following aspects, can be said to rival it. In the first place, no road traversing so short a distance is so indispensable; and, secondly, there is none which can equal it in the picturesque attractions which it opens up to tourists.

The history of the road is full of interest, and particularly for this reason, viz., the encouragement, or rather, we should say, the irresistible temptation which it offered to other railroad lines, inducing them to complete the connections for which it, acting as pioneer, had made the all-important preparation.

The road from Elizabethport to Somerville was built by the Elizabethtown and Somerville Railroad Company,

under a charter granted in 1831. The company was poor, and the road was opened first from Elizabethport to Elizabeth, then to Plainfield, then to Bound Brook, and finally, in 1842, to Somerville, by a desperate effort, resulting in the failure of the company and the foreclosure of the mortgage upon the road. The road being sold in 1846, the strap rail was taken up by the new organization, the track relaid with a heavy rail, and preparations made for a large business. A new company was chartered in 1847 to extend the road from Somerville to Easton, under the name of "The Somerville and Easton Railroad Company." The same year the part between Somerville and White House was put under contract, and in the fall of 1848 was opened to the latter place. In 1849 authority was given to the Somerville and Easton Railroad Company to purchase the Elizabethtown and Somerville Railroad, and the name of the consolidated company was changed to "The Central Railroad Company of New Jersey." This was carried into effect in 1850, the existing roads brought under one ownership, and immediately thereafter, in the spring of the same year, the remainder of the route to Phillipsburg, on the Delaware River, opposite Easton, was put under contract. The portion to Clinton was opened in May, 1852, and the entire road in July of the same year. The railroad bridge over the Delaware River belongs to the Lehigh Valley Railroad Company. In 1860 authority was given to extend the Central Road eastward from a point above Elizabethport to Jersey City, and this has now (1864) been done, though the traveler will observe much remaining to be accomplished.

In 1855 the Lehigh Valley Railroad was opened from Easton, first to Allentown, and then to Mauch Chunk, the centre of the Lehigh Valley coal region. During this same year also, the Delaware, Lackawanna, and Western Railroad completed the line from New Hampton (its

point of junction with the Central Railroad of New Jersey) to Scranton, the centre of the Lackawanna coal region, and a convenient dépôt for the coal transportation from the Wyoming Valley eastward. The road from Scranton northerly to the Erie Railroad had been already built.

Through these two roads the products of the richest anthracite mines of Pennsylvania were brought to the Central Railroad of New Jersey for transportation to the metropolis. The Lackawanna connection requiring a six-foot gauge, the Central Railroad company, at an early period, anticipated this necessity by laying a third rail to Hampton Junction. The common gauge of the Central Road is four feet eight and a half inches, which is uniform with that of the Lehigh Valley Road and its connections, as well as of the country generally.

The value of these connecting lines may be appreciated from the fact that, during the first year after their completion, the business of the Central Road was nearly doubled. During the second year, the Lehigh Valley Road brought for transportation 86,355 tons of coal, and the Lackawanna Road 224,090 tons, an increase of 33 per cent. over the corresponding amounts of the previous year.

In 1858 the East Pennsylvania Railroad was opened between Allentown and Reading, establishing a direct line, with unbroken gauge, to Harrisburg, Pittsburg, and the West.

These are the immediate connections of the Central Road, all of which are of incalculable value. Certain it is that no road could possibly have a geographical position more favorable than this one for numerous and important connections. We ought to mention the fact also that from Somerville a branch road has been recently built to Flemington, which opens up a new section of country, and incidentally gives another route to Philadelphia.

III.

GENERAL DESCRIPTION OF THE ROUTES.

THIS route presents to tourists two important advantages not realized in nearly so high a degree upon any other. The first of these—the most important to the lovers of the beautiful—is the variety of natural scenery; the second advantage is the intimate connections of the route, at every point, with the natural resources of the country through which it conducts, and with those marvelous mechanical appliances by means of which these resources are developed. The beauties of nature and the utilities of man vie with each other for the over-mastering interest.

The trunk route—that is, that of the Central Road itself—extends across the central portion of New Jersey; from New York, or rather from Jersey City, to Easton, in the State of Pennsylvania. In this way the finest portion of New Jersey is traversed, the low, marshy flats toward the south being avoided, as also the barren hills toward the northwest. The road leads through a succession of alluvial valleys, containing the very richest land in the state, and increasing both in beauty and fertility as one approaches the borders of Pennsylvania. Who that has looked upon the Musconetcong Valley from New Hampton will ever forget the scene or its suggestions?

But it is only after entering Pennsylvania (the whole eastern half of which is traversed by connecting lines) that one can fairly appreciate the extent and variety of scenery which the route affords. Mountain ranges of characteristic grandeur, cleft here and there by abrupt fissures to their very base, through which stately rivers

lead their pomp of waters to the sea; rich and beautiful valleys, sometimes so narrow, and, withal, so picturesque, as to remind the traveler of Swiss cantons among the Alps, and sometimes allowed a broader and longer reach by the yielding mountain ranges that inclose them; forests that still retain the rugged aspect of their primeval wilderness, and romantic cascades. The mention of these features but feebly suggests the reality as seen by the eye. The reader must actually visit the Delaware Water Gap, he must himself climb the Pocono range, he must follow the Susquehanna in its winding course for a hundred miles, he must himself look upon the Valley of the Wyoming, with its tragic memorials and its beautiful villages, he must see with his own eyes the rich Valley of Lebanon, he must be drawn up the inclined planes of Mount Pisgah at Mauch Chunk, he must actually realize these things in his own experience, for it is beyond our power adequately to describe them. The sketches too, from the hand of the artist, good as they are, but suggest an outline of the real scene, destitute of the rich charm and body of reality which color imparts, as also of the element of vastness, so prominent in most of the scenes delineated.

To the scientific tourist there is a distinctive attraction connected with traveling in Pennsylvania generally, viz., the fact that in a geological sense this state is literally the *keystone* of the Union, for in its peculiar formations is to be found the key to the geology of the whole country. It was in this state that the first ridges of the Appalachian range were thrown up, which were followed at intervals by other parallel ridges to the southward. There is also this additional peculiarity: that in Pennsylvania, more than in any other state, the coal measures have been preserved, having been simply opened up by the natural convulsions incident to the upheaval of mountain ranges, and not, as is generally the case, entirely swept away by an excess of violence.

It is to this peculiarity that Eastern Pennsylvania owes its rich treasury of anthracite coal, from which it derives the greater portion of its wealth. These anthracite coal-fields are accessible through two important connections of the Central Road, viz., the Lehigh Valley, and the Delaware, Lackawanna, and Western Railroad, as previously stated. Of course to the tourist there is a greater charm, as regards novelty, in the mechanical developments of resources of this nature than is the case in the ordinary appliances of agricultural industry, and for this reason, added to many others, the route which is under consideration is eminently fitted for the purposes of excursionists.

Considered in this connection, the route naturally divides itself into two—a longer one, extending nearly to the southern border of Pennsylvania, and a shorter one, included within the limits of the anthracite coal region. By the former of these we are conveyed as far as Hampton Junction, along the Central Road, where we take the Lackawanna Road through Warren County to the Water Gap, and from thence over the Pocono Mountain to Scranton. From this point, over the Lackawanna and Bloomsburg Road, we proceed through the Wyoming Valley to Northumberland, where we take the Northern Central Railroad to Harrisburg, the southern limit of our route, from which we return through Reading, Allentown, and Easton to New York, over the Philadelphia and Reading, the East Pennsylvania, the Lehigh Valley, and the Central Railroad of New Jersey.

The shorter route only takes us as far down the Wyoming Valley as Kingston, near Wilkesbarre, from which latter place we either take the Penn Haven and White Haven Railroad to Mauch Chunk direct, or else are conveyed by stage to the dépôt of the Lehigh and Susquehanna Railroad, from which we proceed to White Haven, take the stage up Buck Mountain to the village of

Eckley, from which, by the Hazleton and Beaver Meadow Railroads, we are conveyed to Mauch Chunk. After having availed ourselves of the peculiar facilities here afforded us of visiting the mines in the vicinity by means of the inclined planes, the gravity roads, and the switchback, we proceed on our way to Allentown over the Lehigh Valley Road, and thence by the Central to New York as before. This latter route makes us thoroughly acquainted with the coal-fields, and includes features of greater novelty than the one previously described, though not taking in so large an extent of territory, nor so rich an agricultural region as does that through Harrisburg. We ought to add that the Central Railroad Company of New Jersey have made such arrangements with their connecting lines as to give the tourist every desirable facility in taking these excursions, making the expenses of the whole course much less than it would be according to ordinary rates, and giving him, besides, a large margin of leisure time, by issuing tickets good for two weeks—twice the time absolutely required for the longer of the two excursions.

IV.

NEW YORK TO HAMPTON JUNCTION.

Having thus directed attention to the general route, we are now prepared to go over it more specifically with the traveler. Let our time for setting out be morning; and, in addition to this, let us suggest that, after crossing the ferry from the New York station to the dépôt of the Central Railroad on the Jersey City side, at what was late the waters of Communipaw Bay, the traveler should at least, as far as to Elizabeth, take a seat on the left-hand side of the cars, for the sake of obtaining a finer view of New York Bay; afterward, until

he reaches Hampton, he will find the other side more favorable, as commanding a better view of the long, low range of mountains which in this portion of our course we have directly at our right, and which form the line of demarkation from the level lands to the eastward.

Hitherto the eastern *terminus* of the road has been at Elizabethport, but the necessities of business, and the eminent prosperity of the company, have demanded a continuation of the railroad to New York. Since 1860 the company's passenger cars have been drawn over the New Jersey Railroad from Elizabeth to Jersey City by the engines of the latter road, while the freight business has continued to be done by boats from Elizabethport; but now an independent line has been built from Elizabeth to New York, running through a very different country, and giving the tourist some very marked advantages in the matter of natural scenery.

JERSEY CITY, our starting-point after crossing the ferry, was first incorporated as a city in 1820. It is situated directly opposite to New York, on the right bank of the Hudson. The township of Van Vorst was included in the city limits in 1850. The city, which projects into the river, is handsomely laid out with broad streets crossing each other at right angles. It is supplied with water from the Passaic River, and has otherwise all the improvements belonging to the metropolis itself. Its public schools for the benefit of either sex are of unusual excellence. The business of the city is very large, and rapidly increasing. Among the principal things to be noticed in this connection are the flint-glass works, the pottery, and the extensive lumber-yards. Its commercial facilities are also very great. The Cunard R. M. Steamship Company have their wharf and store-houses here, and, besides the Central, other railroads have also their central dépôt at the ferry landing. The Central Road is building a beautiful and commodious dépôt of its own at

this extremity of its line. Besides these railroads, the Morris Canal, 101 miles in length, furnishes another avenue of communication connecting the Hudson with the Delaware.

From Jersey City, as the reader knows, a narrow peninsula extends for seven miles to Bergen Point, opposite Staten Island, separating New York Bay from Newark Bay. It is along this peninsula that our route proceeds.

In the first place, however, we cross a portion of New York Bay, having at our right hand Communipaw Cove, now being rapidly transformed into land, and upon our left the Dutch settlement at Communipaw, as old as New York, and celebrated by Washington Irving—the inhabitants of which are said still to vote for Washington as President. Farther to the left we have a full open view of the bay through its whole extent. The road was here supported on spiles, before filling in, for a distance of nearly a mile and a half, until we strike the peninsula again. It is unnecessary even to allude to the characteristic beauty of the bay as seen from so favorable a situation, and the situation is hardly less favorable at any point of the ride to Bergen Point.

Soon we pass the New York Bay Cemetery, about three miles west of Jersey City, and enter a hilly, undulating country, with many a beautiful villa scattered here and there upon chosen sites. The country is in a very good state of cultivation, and the pleasant farm-house is still no unfrequent sight, though the rise in the value of land and the demand for residences is fast enriching, and, at the same time, removing the natives. Thus for four and a half miles until we reach

SALTERSVILLE, a flourishing little village. Before quite reaching this place we have some excellent views of the bay. The Narrows appear to the eye in very distinct outline with the two forts—one on either side—which command the gates of the Atlantic. To the left, in the

distance, extends the devious coast of Long Island, while the more regular shores of Staten Island stretch away on the right.

Many of the business men of New York find here pleasant country residences at as short a distance from their offices in the city as if they lived no higher up than Thirtieth Street in New York itself. The Morris Canal passes through the neighborhood, and has hitherto been a valuable medium for freight transportation. It is twice crossed by this road. A little west of Saltersville is

CENTREVILLE, a village already advanced to a good stage of growth, and rapidly increasing. From this place a ride of two miles brings us to

BAYONNE, chiefly noted for its beautiful country residences, and likely to rise in importance.

Port Johnston, on the left, heretofore known as Northeast Harbor, is considered the best harbor in the vicinity of New York, and has been selected by the company for a coal-station, calculated to eclipse Port Richmond or any other coal dépôt. Here they have secured a large tract of water-front and extensive piling-ground, and have commenced the erection of wharves, which will be rapidly continued. The water is excellent, and the navigation unimpeded in any way. A few years will show a marvelous change in those now quiet salt meadows.

Bergen Point is the southern extremity of Hudson County, between Newark Bay and the Kills. This is an eminently favorite resort for many from the city, even more so than the rest of the peninsula, and the wisdom shown in the selection is commendable, for, besides its situation upon the sea-board, it has also advantages rarely incident to such a situation. The vegetation is not stinted, nor the soil a sand-bank; on the contrary, it has roads of uncommon excellence, leading through very beautiful wood-lands, so that for delightful drives no

finer situation could be chosen, while the views are varied, lying, as it does, between New York Bay on the east, the Kills and Staten Island on the south, and Newark Bay on the west.

From Bergen Point we proceed westward across Newark Bay. Here, as across New York Bay, though for a greater distance, the road is carried on a pile bridge. This takes us across the central and widest portion of the bay, the distance being 9000 feet, commanding fine views up and down the bay. The pivot draw-bridge is a fine structure of iron, spanning two openings of seventy-five feet each in the clear, and resting on a solid circular masonry pier. This pier was built by Sidney Dillon & Co., on a new plan, interesting to the scientific or practical reader. A foundation was prepared by driving piles as close together as possible in the bottom of the bay where the pier was to be built. These were then sawed off thirty-five feet under water, at the level of the mud, by an ingenious arrangement of machinery, leaving a perfectly level surface. A masonry pier was then built upon an octagonal wooden platform, and within a circular wooden caisson, the whole being kept in position over this foundation by guide-piles, and supported by screws passing from the wooden platform to the timbers on the tops of the guide-piles. As the masonry advanced and the weight increased, the screws were turned by machinery and the mass gradually lowered, till it finally rested upon the foundation prepared. It was then an easy matter to withdraw the screws and other apparatus, remove the caisson, and riprap the bottom of the pier. The office of this timber platform and wooden caisson was to give buoyancy to the mass. The pier was built in a few months, and at a cost of $34,000.

Having crossed the bay, we have now on the left the flourishing sea-port village of

ELIZABETHPORT. This place is within the corporate

limits of the City of Elizabeth, but is yet worthy of separate mention from its position, as well as its having been so long the eastern terminus of the road. It is situated on Staten Island Sound, near its junction with Newark Bay, ten miles from New York, and one and a half from Elizabeth. It is accessible to vessels of 300 tons burden, and its connection with the railroad has made it an important business centre. The steam-boat route from this place to New York, fourteen miles long, is still kept open, though no longer used by the railroad. The water-front, which previous to 1852 was a salt marsh inhabited only by musquitoes, is now lined with wharves from which immense quantities of iron, coal, and lumber are shipped to eastern ports. The new wharves at Bergen Point are diverting the coal trade from this point, but as fast as room is thereby made it is filled up by the rushing in of other business.

The next stopping-place is at ELIZABETH, situated on Elizabeth Creek, a favorite resort for many who, doing business in the city, desire a residence in the country. It is the county seat of Union County, and, including the Port, has a population numbering over 16,000. Until recently, when it became a city, it was called Elizabethtown, and was commonly known as the "*Old Borough*." Its settlement as a town dates back to August, 1664, and its charter as the "Borough of Elizabeth" to February 8th, 1739. Governor Carteret made this the place of his residence in 1664, and it was for several years the capital of the province. The sessions of the Supreme Court were held here until 1682, and here were all the public buildings, though even tradition does not now point out the site on which they stood. Its name has been thoroughly incorporated with the history of the country—especially does it stand prominent in the times of the Revolution. This place furnished as large a number of soldiers for the army of Washington as any other

in the land, in proportion to its size. Nowhere was found a loftier and more self-sacrificing spirit of patriotic loyalty. With a very few infamous exceptions, there were no traitors to tread the streets and breathe the air of the ancient borough. A list of the good and patriotic men whose names can never die would fill pages. We need only allude to the Ogdens, the Daytons, the Barbers, the Williamsons, the Chetwoods, whose descendants still hold honorable positions here. The names of Dickinson, Spencer, Belcher, Caldwell, Austin, Kollock, McDowell, and Murray will not soon be forgotten. The mansion of General Scott still attracts the attention of the visitor, especially when occupied by the venerable hero, as it often is during the summer. A nursery of large extent, well stocked with fruit and ornamental shade-trees, long known as "Reid's Nursery," but now owned by Mr. Buchanan, furnishes another attraction to the stranger as well as the resident not to be overlooked. Elizabeth is not remarkable as a manufacturing city. Though the oil-cloth factories here are the most extensive in the world, still there are but few manufactories compared with other cities of the same size. It is chiefly noted for its excellent morals, cultivated society, numerous schools of a high order, and pleasant, healthful location. We are informed by the oldest physician here that there has been no epidemic within the town for at least thirty years. It contains, including Elizabethport, five Presbyterian churches, four Protestant Episcopal, four Methodist Episcopal, three Roman Catholic, one Baptist, one Congregational, and one Primitive Methodist (colored.) It has three classical and select male schools, two female seminaries, and several smaller select schools for both sexes, besides two very large public schools. There is no town or city in the state that has superior advantages for education. By means of the Central Railroad of New Jersey and the New Jersey Railroad it has access to New York about

every half hour during the day, and several times during the night. These advantages render it one of the most desirable locations for residence that can be found in the vicinity of New York. We find it recorded in the archives here, that "in 1739 the Rev. Mr. Whitfield left New York at noon for Elizabethtown. He reached here in safety the next day time enough to dine with the Rev. Jonathan Dickinson, and to preach in the afternoon." Now the same journey occupies about forty-five minutes. It is worthy of note that the College of New Jersey was founded here in 1746. The Rev. Jonathan Dickinson was the first president. It was afterward removed to Newark, and thence to Princeton, where it is now one of the most flourishing in the land. Though for a long period the "Old Borough" seemed to have been "finished," yet during the past ten years a spirit of enterprise has been aroused, beautiful dwellings and country seats have been rapidly multiplied, churches, public buildings, and streets have been improved, and we venture to predict that within the next ten years it will outstrip all its neighbors in increase of prosperity and wealth.

Till the opening of the route we have so far been describing, the tourist was carried from Jersey City to Elizabeth over the New Jersey Railroad, which here intersects the Central Railroad, through the extensive and flourishing city of

NEWARK, on the west bank of the Passaic River, three miles above Newark Bay. It is the real, though not the nominal capital of the state, and is the most populous and flourishing place in New Jersey. Its site is a fertile plain, somewhat elevated above the river, and rising toward the west, affording excellent sites for residences. The court-house, in the more elevated portion of the city, is built in the Egyptian style of architecture. The city has extensive manufactures, from which are produced leather and India-rubber of various fabrics, carriages, wagons, and railroad cars, saddlery, machinery, jewelry, paper-hangings, cutlery, soap, candles, etc. Prominent among these manufactories is the extensive paint factory of the New Jersey Zinc Company. Newark has also important commercial facilities, which are being every day brought more fully into use. The river up to this point is navigable for light craft. The Morris Canal passes through the city.

Leaving Elizabeth, we come in two miles to *Mulford*, as yet only a railway station, but with every prospect of growth. The country now begins to be more varied in scenery; the range of hills at our right is from this point directly at our side, permitting us to look up its beautiful slopes upon many a rich farm and farm-house. Two miles more and we come to

Craneville, a small village nineteen miles from New York.

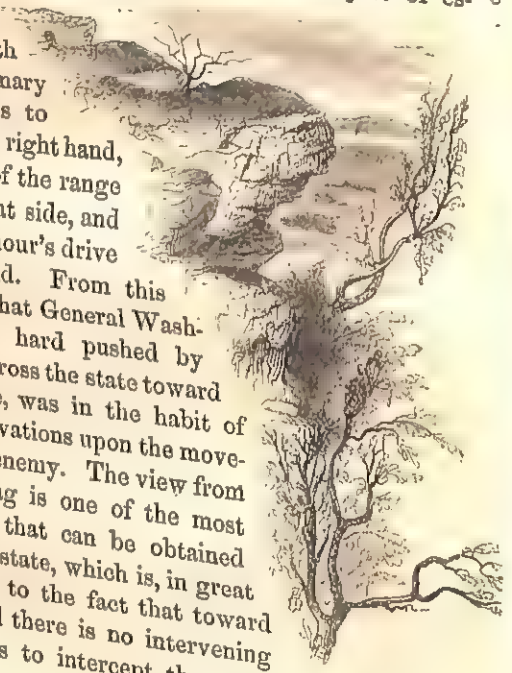
WESTFIELD, three miles farther on, is a flourishing town, having about 2000 inhabitants; the surface toward the south is level, but is hilly on the north. Great improvements have been recently made; the town has taken a fresh start, has built a new church, and promises to become a rich and prosperous borough. Two miles' ride brings us through

SCOTCH PLAINS. The old village from which the station is named is picturesquely situated about a mile from the road, at the foot of and running up on the slope of the hilly range which we have on the north. Despite its name, the face of the country is here much broken and diversified, and fine sites for residences abound. From this we are rapidly borne to the important town of

PLAINFIELD, twenty-six miles from New York. The

railroad passes through the west part of the town, which is situated in the midst of a fertile country, drained on the east side by Green River, and on the west by a branch of the Rahway. The town was set off from Westfield in 1847, and has a population of about 3000 souls. The Opheleton Seminary for young ladies gives the place an additional attraction to New Yorkers, and the climate is the most favorable.

The tourist, after leaving Plainfield, should be on the sharp look-out for Washington Rock, an object of especial interest from its connection with the Revolutionary contest. It is to be seen on the right hand, near the top of the range of hills on that side, and about half an hour's drive from Plainfield. From this point it was that General Washington, when hard pushed by Cornwallis across the state toward the Delaware, was in the habit of making observations upon the movements of the enemy. The view from this lofty crag is one of the most commanding that can be obtained in the whole state, which is, in great measure, due to the fact that toward the sea-board there is no intervening range of hills to intercept the prospect. Elizabeth, Amboy, Rahway, Newark, and, under a favorable state of atmosphere, even the shipping in New York Bay, may be clearly seen from this point. To aid the reader in fixing the locality, it may be of use to



WASHINGTON ROCK.

suggest that a considerable clearing has been made about this object of interest, making it distinctly visible from the cars; and, besides this, a hotel has been located in the immediate vicinity. The abrupt feature of the rock, as given in the sketch, can only be appreciated from a nearer view.

New Market, twenty-nine miles from New York, is a small station, of little importance except that it is situated in the midst of a country rich in agricultural products. Five miles farther on is

Bound Brook, one of the oldest towns in New Jersey. Here we come upon the valley of the Raritan, at which point also the Delaware and Raritan Canal touches. All the way from Plainfield the traveler can not fail to observe that he is continually entering upon a more fruitful district, for we are now moving directly into the midst of a series of rich alluvial valleys, which reach one after another entirely across the state into Pennsylvania and even to Tennessee. From Bound Brook we at once rise gradually and approach

Somerville, the shire town of Somerset County, thirty-eight miles from New York. The town is situated on the north bank of the Raritan River, along the banks of which are beautiful drives for many miles, which form a great attraction during the summer. It is a tastefully-built town, laid out in a highly-cultivated country. The river, the beautiful valley, and the many church spires of the town, make the view from the mountain-side particularly attractive. Copper ore has been found within a short distance. From Somerville, as we said at the introduction, a railroad (called the South Branch Railroad) has been constructed to Flemington, which will give a short route to Philadelphia. At Flemington it connects with the railroad to Lambertville, on the Delaware; and at this latter point a southern connection is made, by means of the Belvidere-Delaware road, to Trenton and

Philadelphia, while a northern route conducts to Easton and Belvidere. Thus will Somerville, apart from its natural attractions, become a prominent centre of interest on account of its important position as respects commercial intercourse.

Raritan village, one and a half miles farther on, is really but a part of Somerville, and has all its advantages. It has also a valuable water-power, the water being brought from the Raritan River through a canal three miles long. A number of manufactories of various kinds have been erected, but the lack of money in the Water-power Company, and in those who have built these mills, has prevented the success that was looked for. There is here a fine opening for capital and enterprise combined (not the latter alone), and Raritan will yet be classed among the wealthy manufacturing villages of New Jersey.

Four miles farther on, up the valley (we say *up* because the Raritan River, formed by the union of its two branches near Somerville, runs eastward, emptying into Raritan Sound at Amboy), we pass through a rich country to

North Branch, named from the north branch of the river. After passing through

White House, a little village forty-seven miles from New York, we soon reach

LEBANON, a fine farming district, three miles farther ahead. From this point the country becomes rolling. The limestone hills—from which the land derives no small measure of its richness—now present to the eye their exquisitely rounded forms. It is impossible to give an idea of the change which has passed over this whole district since the construction of the Central Railroad. Beautiful houses have been erected, tasteful grounds laid out, and to such an extent have the agricultural resources of the region been developed, that land has within a few years risen from $50 per acre to $150.

CLINTON, two miles from Lebanon and fifty-four from New York, is a little village of no mean pretensions, in Hunterdon County, on the south branch of the Raritan. It has fine water privileges and extensive limestone quarries, from which a vast district of country is supplied. Its mills are large, and its mercantile business very considerable, arising from the fact that it is surrounded by one of the richest agricultural districts of the country. Clinton proper is two miles from the station, on the banks of the river, and a rival village has grown up round the station which threatens to outstrip the original settlement. A branch railway to the village has been chartered.

At Clinton we cross the south branch of the Raritan over the far-famed High Bridge, which is 105 feet high

VIEW FROM HIGH BRIDGE.

and 1300 feet long. But the glory of this bridge has now departed; it has lost its old claim of picturesqueness. The company have for three or four years been transforming it into a lofty embankment, with a double arch culvert, at a cost, when completed, of $180,000. What has been lost in romance has surely been gained in durability.

High Bridge. From this station we follow the Spruce Run in among the hills to

Clarksville, fifty-nine miles distant from New York; and a mile farther on is

NEW HAMPTON, where is the junction of the Delaware, Lackawanna, and Western Railroad.

Here the traveler changes to the broad-gauge cars for the Delaware Water Gap, Scranton, and the Wyoming Valley, unless he prefers keeping directly on to Easton and the Lehigh Valley, reversing the route as now given, in which case he will remain in the cars.

V.

HAMPTON JUNCTION TO DELAWARE WATER GAP.

AT Hampton Junction we have before us the beautiful Musconetcong Valley, which, although it can not boast of an extensive area, is yet, in the matter of beauty and richness of soil, perhaps without a superior in the United States. Indeed, standing on this elevation, one has before him a prospect of lowlands and rolling hills, dotted with cosy hamlets, with thrifty fields stretching between, which only Durand's pencil could interpret truly, preserving with his genial touches the soul of beauty which shines through all the splendid vista.

The country which we now enter has a more varied and romantic aspect. We find ourselves penetrating a hilly district full of rich farm-lands, and the eye revels with delight among features of surpassing beauty.

Six miles from Hampton Junction we reach the little village of

Washington, which is drained by the Musconetcong and Pohatcong Rivers, and contains a population of about 2000 souls. It is situated at the left of the railroad, and makes a very charming appearance, with its

many elegant cottages and its numerous tokens of outward prosperity. Leaving Washington, we are borne through Oxford Mountain by way of the Van Ness Tunnel, which is half a mile in length.

Oxford Furnace, three miles beyond Washington, is an enterprising town on a branch of the Pequest River. There is an extensive furnace here, which gives name to the town, and iron ore of a rich quality is found in abundance in the vicinity, and is easily smelted.

Bridgeville, five miles farther on, is on the Pequest River, and at

Hope, a mile beyond, a junction may be effected with the Belvidere-Delaware Railway by an omnibus ride of three miles. The town is drained by Beaver and other creeks, the affluents of the Delaware. At this point we are seventy-five miles from New York City, in the midst of the fertile townships of Warren County. Passing through

Delaware Station, three miles distant, the chief attraction of which is the fifteen minutes' opportunity afforded for dinner, we reach

Columbia, which is a small village on the east bank of the Delaware, at the mouth of Paulius Kill, and three miles beyond Delaware Station, from which a ride of five miles conducts us to the Water Gap.

As the reader has noticed, we have been moving along a series of rivers and creeks, which, besides adding so sensibly to the fertility of the country, have been charming to the eye, and refreshing to every bodily sense. These streams are skirted too by forests, which here and there grow quite down to the water's edge, adding very much to the general beauty of the scenery. The hills around us on either side, and the mountains beyond, together with the long reaches of the valleys that intervene—these are more vivid, as presented to the eye of the actual observer, than they can be as reproduced by means of descriptive sketches.

VI.

DELAWARE WATER GAP.

THROUGH the Delaware Water Gap, as through a wide-open gate, we enter into an inner circle of mountain scenery, entirely different to that which we have seen hitherto—more romantic and more abrupt. And to this more intimate recess of the mountains the Gap is a fit entrance. It is visible for some distance before we enter it, but at a distance only those features are discernible which are common to all openings of this nature.

These gaps are a natural feature of very frequent occurrence in the Appalachian range.

The Blue Mountain (or Kittatinny) has, besides this gap which is made by the Delaware, another similar break called Wind Gap, made by the Lehigh, farther to the west, another made by the Schuylkill, and still another by the Susquehanna, above Harrisburg.

According to Professor Rogers, the distinguished geologist of Pennsylvania, certain transverse dislocations have occurred in all the great ridges and valleys of the Appalachian region, being the primary cause of most, if not all of these deep notches, which are so commonly known as water gaps, and which cleave so many high mountain ridges to their very bases. And in all these phenomena he traces the following uniform law, viz., that the eastward strata of the fissure are thrust forward to the north. Thus there is a gap in Sharp Mountain, in which the eastern prolongation has been thrust northward of the western by a distance of many hundred yards. In the wide gap of the Susquehanna, above Harrisburg, the law is shown by measurement; and in the Delaware Water Gap, it is apparent to the eye that the

New Jersey mountain side has strata thrown several hundred feet to the northward of the Pennsylvania side.

We would suggest, however, that it may be more proper to say that the western side has been thrown to the southward, than that the eastern has been thrust northward; for it seems to be necessary to account for these clefts by the influence of water acting after the volcanic eruptions which formed the mountain ranges had already taken place; and as the streams that now make their way through these run southward to the Atlantic in such a manner as to strike more forcibly the western embankment, we would naturally suppose that originally this had something to do with the southward projection of the western sides of the mountains.

The Delaware River, which penetrates the Kittatinny at this point, rises, as do also the principal tributaries of the Susquehanna, in New York State. It rises in two branches on the west of the Catskill Mountains. These branches join each other before entering the state, about ninety-five miles above the gap, the latter part of which distance it runs along the base of the Kittatinny Mountain. The river winds in its course, and is at this point of considerable depth. It frequently overflows the flats upon its banks, which the farmers always hail as a god-send, so much does it add to the fertility of the land through the rich deposit which it leaves behind.

The distance through the mountain is about two miles, and the banks rise precipitously from the water's edge to the height of 1600 feet, leaving at the southeast entrance scarcely room for a road beneath the overhanging rocks. The strata of the mountain lie at a considerable angle with the horizon, giving evidence of the might of the convulsions by which they were raised from their original level, and they are made up mostly of sandstone and conglomerate rock.

If our fellow-traveler should ask of us what season

would be the most favorable for our visit to the miracl
of Nature, we should answer, those seasons which ar
most favorable to the view of any sort of natural scen
ery. He may choose the early summer, for the sake o
the rich verdure of the surrounding landscape; or h
may come in autumn, when Nature puts on her garb o
crimson and gold, and see what a charm it is which ir
vests our American forests; but, at whatever season, he
shall find the entire scene—the near mountains, and the
gently-winding Delaware, and the cleft sides of the Kit-
tatinny, with the two long, low ledges which it puts
forth like arms on either side of the river, upward and
downward, as if it would reach up to punish the violent
river at its sources, or, on the other hand, would chase it
down vengefully to the bay—one of the most pictur-
esque which this green earth can afford.

The views of the Gap, of course, are varied, as seen
from different points. The tourist may take his posi-
tion below the Gap, on the banks of the river, and will
here, doubtless, get the most favorable view of the fis-
sure itself. From the Kittatinny House a better posi-
tion is afforded for the full continuation of the scene;
and by ascending to the top of the mountain on the
Pennsylvania side—an ascent of about four miles—he
will obtain a magnificent view of the extended valley of
the Delaware, including also a vast reach of mountain
scenery.

The Kittatinny House is situated on a high ledge in
the Gap itself, on the Pennsylvania side, and is a favor-
ite summer resort for travelers. There is a pretty little
village half a mile above the Gap, where one seems some-
how to be thrown backward into a past generation, so
old-fashioned are the habits of the country farmers who
live here, daily tilling the soil of the rich meadow-lands
along the river, and nightly gathering in the bar-room of
the Brainerd Hotel for that familiar gossip so loved of

ld, when the good people of this world seem to have had time for it.

The view which the artist has given here from Sunset Rock looks up the Delaware from the inside of the Gap.

VII.

DELAWARE WATER GAP TO SCRANTON.

If we had continued our original course along the Central Railroad of New Jersey from Hampton to its western *terminus*, a distance of fifteen miles, we should have entered Pennsylvania at Easton, crossing the Delaware at that point; but, instead of that, we have been traveling northwest, over the Delaware, Lackawanna, and Western Railroad, for a distance of twenty-six miles, and have entered Pennsylvania through the Water Gap about twenty-five miles above Easton.

This same course, by the same road, we now continue toward Scranton, which is the northern limit of our route. The ride from Water Gap to Scranton combines features of real sublimity, such as are to be obtained by no other ride of the same distance in the country. This is due to the fact that we actually climb a mountain upward of 2000 feet high—as high as Hoosick Mountain, through which the Troy and Boston Railroad are thrusting their celebrated tunnel—and descend again to its base, having during the entire distance an unobstructed view of a vast reach of country to the left, the features of which yield the very consummation of the romantic. Here the traveler should take the left-hand side of the car, the view to the right being obstructed by the mountain.

This ride seems to upset all our ideas as to the limitations restricting railroad construction. Indeed, when we consider the natural difficulties in the way of the

Delaware, Lackawanna, and Western Railroad, we can no longer wonder that, although the earliest of the coal-roads in its charter, it was the very last to be completed. Nor were natural difficulties the only ones. The road, in a pre-eminent sense, was built upon confidence in the uncertain future. It was under the necessity of creating the traffic that was to fill its cars; for it was only by the encouragement which it could offer through a ready communication with the Eastern market that the vast measures of coal, scattered in careless profusion through the Wyoming and Lackawanna valleys, and upon the transportation of which it counted for its own support, could even get an appreciable value.

Four miles from the Delaware Water Gap is situated STROUDSBURG, the shire town of Monroe County, Penn., on the north bank of Smithfield Creek. Its population now numbers over 1000. The town is laid out on one street, and has a court-house, jail, and the buildings incident to a shire town. There is also quite an extensive forging business carried on.

Spragueville, five miles farther on, is a small village on Broadhead Creek. Commencing at Spragueville, we have an upward grade of sixty-five feet to the mile, directly up the Pocono, for a distance of twenty-five miles. There is little particularly noticeable about the stations between Spragueville and Scranton, the most of which are hardly to be called villages even, consisting for the most part of the humble dwellings of the wood-cutter, the teamster, the saw-mill proprietor, railroad workman, etc.

Henryville and *Moscow*, however, have greater pretensions than any of the others. The streams upon the Pocono Mountain, in the vicinity of Tobyhanna, thirty-six miles beyond the Water Gap, are celebrated for the abundance of trout found in them, which give them a peculiar charm for the amateur fisherman.

The peculiar scenery which this portion of the route affords is its most notable characteristic.

After ascending the mountain for three miles (from Spragueville to Henryville), we begin to look down from a continually increasing height upon the valley below.

A little beyond Oakland, which is five miles beyond Henryville, the view grows bolder in feature and even magnificent. It is no rare occurrence here to see the heavy mist-clouds far below us in the valley, while we seem to be traveling upon a plane raised high above the earth.

Between *Oakland* and *Pocono Forks*, which is six miles from the former place, the features which we have noticed are heightened to their crowning point of grandeur. Over against us, in distinct relief against the sky, is seen the Delaware Water Gap, which we have left twenty-three miles behind us, but which now appears directly at our left; below it, reposing in its shadow, other low ridges lie successively, while between these and ourselves a wide-reaching valley intervenes. We are here 1100 feet above the level of the Water Gap.

Tobyhanna, thirty miles beyond the Gap, is on the top of the mountain.

We soon begin to descend again, through rugged forest scenery, for more than twenty miles, passing through Gouldsboro', Dunning, and Greenville, to

SCRANTON. This now important place is fifty-seven miles from the Water Gap and 143 from New York.

Just before reaching the town, the traveler should not fail to notice the romantic cascade which is formed by Roaring Brook, as it leaps over the mountain rocks on the way to Scranton.

This same Roaring Brook is very intimately associated with the business growth of Scranton. It was upon its banks that Philip Abbot, in 1788, built the first grist-mill in the neighborhood, which, besides answering for

ROARING BROOK FALLS.

the necessities of Luzerne County, had also to supply the demands of two adjoining counties. It was surely sufficiently simple in its construction, both as regards the building and the internal mechanism. The edifice was supported by crotches rudely thrust into the ground; the spindle of the mill-stones was turned by a leathern belt that passed around the drum of the water-wheel, and for a *bolt* a dry deerskin was used, completely perforated with small holes, and this unique contrivance was all that separated the flour from the coarse bran.

In 1798, Benjamin and Ebenezer Slocum (brothers of the little Frances, the story of whose abduction from Wyoming, when she was only five years of age, by the Indians, has become a matter of familiar tradition) settled here, bought the grist-mill, built a saw-mill and a forge, carried on the distilleries, and purchased besides 1700 acres of land, long known as the "Slocum Farm."

The town had at first gone by the name of Capouse, the name of the chief of a tribe of the Delawares dwelling upon the flats at the original settlement of the place; but from the prominence of the Slocum brothers it came now to be called "Slocum Hollow," certainly not a more euphonious title than that which it displaced.

Yet in 1810 there were but three dwelling-houses in the town, though a post-office was established, the mail

CAPTURE OF FRANCES SLOCUM BY THE INDIANS.

being brought from Easton over the mountains, *vid* Wilkesbarre, once a week, on horseback.

The village of Scranton owes its establishment to the efforts made by the friends of the Drinker Railroad to get the road constructed. William Henry was the first man who fully appreciated the importance of the natural resources of the place, the value of a speedy communication with market by railroad, and the result which such a road would have upon the prosperity of the infant village. In partnership with Edward Armstrong, from the Hudson, he bought 503 acres of land. Upon the death of Armstrong soon after, Selden Scranton and his brother, Colonel George W. Scranton, together with a Mr. Grant, entered into copartnership with Henry, and purchased the entire Slocum estate.

From the 11th of September, 1840, when the building of this company's blast furnace was commenced, is to be dated the commencement of what we to-day call Scranton. The products of the furnace were shipped to market by the Delaware and Hudson Canal, or by the North Branch and Tide-water Canal, and in either case had to be conveyed for miles on wagons in order to connect with these communications. The first rolling-mill and nail-factory was completed in 1844, and here, in 1845, the T rail was made for the first time in the United States. Two years after this the Erie Railroad contracted with the Scrantons for 1200 tons of iron rails. The honor of the inception of the railroad from Great Bend (forty-seven miles northwest of Scranton) to the Water Gap is due to Colonel G. W. Scranton. In 1853 the present line was adopted. Fifteen years before the completion of a railroad outlet, lands rich in coal were purchased for $15 per acre, which now sell for $300.

The greater part of Scranton has been built up in the course of the last ten years, and so rapid has been its growth that it has now a population of about 12,000.

The town is situated on the banks of the Lackawanna River. The best view to be had of it is obtained by visiting the eminence of Hyde Park, which is on the opposite side of the river. One looking from this point will behold upon the left hand the more elegant portion of the town, while a very large section which he beholds at the right, and which vulgarly goes by the name of *Shantyville*, is made up of the humble dwellings of the coal-miners and the laborers in other works. These buildings, looking each one the copy of its neighbor, and withal so uniformly laid out in rows, with narrow lanes between, present a truly picturesque appearance. The natural scenery, as viewed from this point, is not without its characteristic excellence. The river, which winds about the town, is plentifully margined with shade-trees, and the view by the railroad bridge is very pret-

RAILROAD BRIDGE AT SCRANTON.

ty. The mountains which surround the town have generally none of that hazy veil about them which distance would give, so near are they, and their forms so well defined.

Just noticing that Hyde Park is itself a village of no

SCRANTON.

mean pretensions, let us return to the opposite side. Near the station is to be seen what, from its shape, is called the Round House, and which contains the engine that blows the blast furnace, one of the largest, if not quite the largest engine in the country.

Taking the main street of the town to the northward, we soon reach the Wyoming House, an elegant edifice of large proportions, and affording the traveler the most excellent accommodations.

A walk of five minutes from the station takes us to the Rolling Mills, on the banks of Roaring Brook. On the way we pass the residence of the late Colonel Scranton, which is very elegant both in itself and in its surroundings. These mills are on the north side of the town, and, to be properly appreciated for their scenic effect, should be visited at night. They consume over 100,000 tons of coal yearly, and employ over 1000 men.

The appearance of these mills at night, when each tall chimney is surmounted by a crown of flame, and every window glares like a great eye of fire, with streaks of dazzling light pouring like tongues of flame from every door, set off in the most striking relief by the darkness around, baffles description.

The ore is first taken from the mine about eight miles from the mills; then it is smelted and run into pig-iron in the furnaces, after which it is ready for what are called the "puddling mills."

The process of "puddling" gives one an idea of manual labor about as effectually as any known operation incident to mechanic art. A dozen or so bars of pig-iron are placed in a furnace by themselves, and, after being heated to a high degree, are taken out to be "puddled" —that is, to be wrought by a sort of kneading process. For this purpose they are put into a separate furnace, which is covered in front by a door, in which is a circular aperture that admits the long bars of the workmen.

The process which the iron undergoes under the heat to which it is exposed, in connection with the perpetual stirring together or kneading which the workman gives it, is one of *decarbonization*. After the pig-iron has reached the proper heat, say in about one hour, it begins to crumble and dissolve, and soon it begins to seethe in a sea of melted cinders. Then it begins to yield sensibly to the puddling, under which process it is, in the course of another hour, massed and concentrated into four or five separate balls, averaging nearly a hundred pounds each. During these two hours the workmen, who attain perfection in their trade only through years of practice, stand stripped to the waist within reach of a heat absolutely intolerable to one unaccustomed to it, busily plying their long bars upon the pile within the furnace, and facing unflinchingly the glaring mass as it rolls from the furnace-jaws, seeming like so many "Plutonian shapes" fondling infernal fires. It is heavy work too; and it develops chests in these men such as are to be met with nowhere else. Look in upon the balls after their two hours' ordeal, and imagine, if you can, that these incandescent crystals, as they seem, will in one hour be simply black iron again!

The balls, completed, are taken from the furnace in barrows made for the purpose, and wheeled a little distance to a machine, called the crocodile from its shape, which chews them into a cylindrical shape convenient for the process of rolling which is to follow, and crushes or squeezes out the clinker with which the iron is still filled. The entrance of the balls into the machine is accompanied with an explosive report, arising from the sudden contact of the red-hot iron with cold water. The iron is then rolled, which is simply a process of elongation, accomplished by passing it through several sets of rollers, till it is of the length and shape required. But this is only the preliminary rolling. The reader has seen

that railroad iron, when worn, shows several distinct layers or *laminæ* welded together. This appearance is due to the fact that the rails, after their first rolling, are again broken up into short ones of about three feet long, and then, placed in piles of about eight inches breadth and depth, are put into heating furnaces, and, after being brought to a white heat, are taken out, and each pile is rolled into a rail, which, after being sawed off the proper length while still hot from the rolls, is afterward carefully straightened by one machine, then notched for the spikes by another machine, and is ready for use.

VIII.

THE COAL-FIELDS.

THE most important feature of Scranton is that it is the centre of the Lackawanna coal region.

Geographically, the coal-fields of Pennsylvania are included between the Blue Ridge and the Susquehanna. The reader will understand that we refer solely to anthracite coal. These fields are naturally divided into three compartments, viz., the Lackawanna Coal Basin, including the coal measures of Lackawanna and Wyoming valleys; the Lehigh Basin, farther south, and centering about Mauch Chunk; and the Schuylkill Basin, still farther to the southward.

The geological relations of this important product form an interesting study. Let the reader imagine a line drawn from Nova Scotia to the Far West; this line will represent the backbone about which this continent has been built up. Time was when all that existed of America was a range of hills along this line, which, with their bases elevated above the level of the ocean, formed a long but narrow island, on the north and south of which rolled two grand oceans.

The Alleghanies were not yet, nor the Rocky Mountains.

By the gradual abrasion of the earth's surface under the influence of the waters, stratified deposits were formed, which at length appeared above the water-level in low marshy islands. Every condition was favorable to the most luxuriant vegetation; growth was swiftly followed by decay, and decay by growth, until beneath the surface lay an inexhaustible treasure of bituminous matter. Now, after this work had been going on for centuries, let the reader imagine the violent dislocations and disturbances which would result to this quiescent mass of vegetation by the upheaval of the Appalachian range in successive ridges. He will also readily understand that each ridge thrown up to the southward must necessarily have inclosed and imprisoned many an inlying body of water. These pent-up waters, violently forcing an outlet through the mountains—outlets which still remain, and which, in the proper place, we have noticed in speaking of water gaps—of course tore up, and, so far as was possible, swept away the already loosened strata of the coal formations. Where the mountain ranges had been thrown to a loftier height, as in those farther to the southward, a greater resistance was offered to the escape of the inclosed seas, and therefore the escape, when effected, was more violent in its effects, which accounts for the fact that, for the most part, the coal measures of the south have been entirely swept away. North of the Susquehanna, however, there was not sufficient violence to destroy the coal, but yet enough to insure its exposure to those external influences by which it has been freed from its hydrogen, and thus changed from bituminous to anthracite coal. In the western part of the state there was hardly any disturbance at all, therefore no exposure, therefore no anthracite.

The "outcrop" of the coal is generally found in the

vicinity of rivers; but sometimes we find it in situations into which it has been carried by water. Scranton stands upon a deposit formed in this manner. Above the coal lie clay, micaceous sandstone, and slate; and underneath it lie shale, conglomerate sandstone, and the old Devonian deposits—strata which, at their greater depth, extend, according to the estimate of Professor Rogers, 40,000 feet below the surface.

The Lackawanna and Wyoming Valleys lie, as related to each other, in the position of two outspread wings, balancing about Pittston as their pivotal centre, where the Lackawanna River empties into the Susquehanna. From Carbondale, at the head of the Lackawanna Valley, the coal basin extends to Shickshinny, where the Wyoming Valley terminates—a distance of about fifty miles. Over this space there are scattered some fifty collieries, belonging generally to the railroad or canal companies, but in some cases to private individuals.

The mines are exceedingly simple in their mechanism and operations. Where the "outcrop" allows of a direct access to the mine by means of an inclined plane, this plane is called a *slope;* if such access is inconvenient, a shaft is sunk perpendicularly downward, sometimes for a distance of 200 feet before reaching the coal. Over the *shaft*, or over the summit of the *slope*, a tall, slender structure is built, called a *coal-cracker*. These are all very similar, so that seeing one is seeing all; therefore we will consider particularly the Oxford Shaft, which, besides being now nearly at hand, has also the advantage of the latest improvements. This mine is on the Hyde-Park side of the river, and is owned by the Oxford Coal Company.

As to the interior of the mine itself, there is nothing particularly interesting, though, from mere curiosity, persons are tempted to descend the shaft. This subterranean visit reveals nothing else than a series of cham-

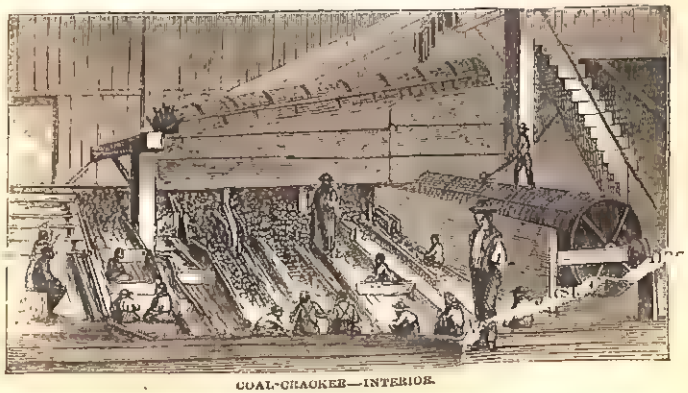
bers extending in every direction, which are called *drifts*. The process of mining is very simple, yet experience and skill are necessary in the miner, in order to avoid the possibility of accident. As your guide leads you to the end of one of these chambers, roofed with slate or coal, you have an opportunity of witnessing the miner at his work of blasting. Making a hole horizontally, directly before him, in the coal rock with his crowbar, he charges it with powder, applies the slow-match, gives the concerted signal, retreats. The explosion takes place, and the coal is then put into the car, which has been at the proper time brought near upon rails laid for that purpose in each separate chamber. These cars hold two or three tons each, and when filled are carried back to the entrance of the shaft. The mules employed in this transportation have their stables in the mines; their drivers are generally Irish, while, for the most part, the miners themselves are Welsh. The full cars are drawn up the shaft by steam.

If we enter the room of the coal-cracker, which lies on

COAL-CRACKER—EXTERIOR.

the ground floor (on a level, that is, with the road), we shall see the engine at its work elevating these cars, or

letting empty ones back into the mine. The engine also turns the coal-breaker. The coal in the full cars is carried to the very top of the building, where a workman stands ready to take out of each the card of the miner to whose account the load is to be attributed; after which the car "dumps off" its contents into a shute, along which it is conducted to a "landing," where are stationed other workmen with picks, to break up any pieces too large to go on to the breaker. Through another shute the coal is conveyed into a sort of hopper, from which it passes between the rollers of the breaker, the toothed surfaces of which crush the coal into various sizes, just as it happens; after which it is emptied into cylindrical screens which are continually revolving, and, as they move, let the various sizes slip through apertures of corresponding sizes, the largest size of all, the steamboat coal, passing out at the open end of the screen. There is a set of apertures for *grate*, one for *egg*, one for *stove*, one for *chestnut*, and another for *pea* coal. Each size is dropped from the screen into a separate shute, and all along these shutes little boys of from five to ten years old are stationed to pick out from the coal, as it passes, the slate-stone which inevitably gets mixed



COAL-CRACKER—INTERIOR.

up with it. This room, containing the screens and these shutes, is called the slate-picker's room, which is given in the sketch as the interior view of the coal-cracker. The coal, after leaving the slate-pickers, passes on down the shutes into the pockets or large bins at the end of each, placed to receive it, and from these it is shipped to market *vid* the Lackawanna and Bloomsburg, or the Delaware, Lackawanna, and Western Railroad. The connection with these roads is made by a system of lateral roads which lead in all directions to the various mines.

For each load a miner receives about seventy-two cents, and he frequently makes from sixty to eighty dollars per month. But he is not provident; his monthly wages are spent almost as soon as earned, and generally in "sprees" with his companions. It is considered mean to lay up any thing. Hence it is, probably, that the miner puts his children into the mines to the work of slate-picking at the earliest possible moment. He has no idea of any better lot for his children than has befallen himself.

Accidents sometimes happen in the mines, but not frequently. Curiously, at the moment we are writing this, upon glancing at an evening paper, we find a report of a recent serious explosion from fire-damp at Howell & Co.'s mines in Hyde Park. Eight boys were killed, and three others seriously wounded. Sometimes, too, the wall breaks in, actually burying the miners alive, so that suffocation ensues before there is a chance for rescue. These accidents frequently develop the noblest qualities in the nature of the miners and their overseers. In the winter of 1843 and 1844, a portion of the Delaware and Hudson's Co.'s mines at Carbondale fell in upon the workmen. For several days there had been a premonitory crackling. At the time of the catastrophe all the lamps were put out, and workmen or horses entering or leaving the mouth of the cavern were blown from it as

leaves before the wind. Those at work farther on were buried alive, and crushed by the strong teeth of the coal-slate. Alexander Bryden, assistant superintendent of the mines, hastened in to discover the situation, and, although met by three miners who warned him of his danger, he patiently found an opening into the mine, but so small that he had to lie prostrate and drag himself along. Traveling a mile thus, he reached the "heading," or end of the chamber, found twenty men alive, but shut in by a solid wall of coal, and among them his own son! He went still farther in to find and rescue a wounded miner, lifting whom upon his shoulder he retraced his steps.

In closing what we have to say about the coal-fields of this region, it is impossible not to remark the important fact that, while all along the Lackawanna, from its source to Pittston, where it joins the Susquehanna, the coal measures seem to lie in careless profusion, yet, if we trace the Susquehanna itself up to the two lakes in New York which constitute its sources, not one vein of coal is to be found. This goes to prove that the grand basin between the Blue Ridge on one side, and the lower portion of the Susquehanna and the whole of the Lackawanna River on the other, was once a vast lake, into which emptied the waters of the Chemung, the Chenango, the Delaware, and the Susquehanna (*i. e.*, the upper portion of it), which waters forced for themselves outlets southward to the Atlantic through the Water Gap and similar clefts in the ridge which formed their outward inclosure. Instead of the lake, there were left, after this expulsion, only the prolongations of the several rivers coming from the north, and along these prolonged parts of the rivers where such violent forces have been at work the coal has become exposed, and, in many cases, has been conveyed from inaccessible places to just the position convenient for the purposes of the miner.

IX.

SCRANTON TO SUNBURY—THE WYOMING VALLEY.

Our course now lies in a southwesterly direction from Scranton, over the Lackawanna and Bloomsburg Railroad. This road was incorporated in 1852. It extends from Scranton to Northumberland, a distance of eighty miles. The wealth of the country through which it passes consists chiefly of coal, the agricultural resources of the Lackawanna and Wyoming Valleys being neither very abundant nor very well developed.

Taylorville, the first station upon the road, is a village three miles from Scranton, and near it is the Union Colliery, the first one which is to be found on the Lackawanna River below the Oxford and Bellevue mines at Hyde Park. Three miles beyond is

Lackawanna. Here iron ore is found. The North Branch divisions of the Pennsylvania Canal crosses the town seventy-three miles from Northumberland. The population of the town is upward of 1000.

Pittston, nine miles from Scranton, is a thriving town. Between Taylorville and Pittston are three collieries, belonging to various companies. Here the Lackawanna empties into the Susquehanna, and here, too, is the head of the Wyoming Valley. From this point to Northumberland we follow the North Branch of the Susquehanna for seventy miles.

The Wyoming Valley, which we now enter, is intimately connected, as regards its early history, with the Lackawanna, which we have just left behind. Both valleys were the first place settled by New Englanders from the State of Connecticut; but their possession of the soil was disputed by the Pennsylvania landholders, and from this resulted what was called the "Yankee and

Pennamite war." It was not the object of the Yankees to set up a separate state jurisdiction; they were willing to give allegiance to the Pennsylvanians. But with this the great landholders were not satisfied; they did not want these shrewd men and lovers of liberty among them, it being their settled purpose that the whole social and political power of the state should rest with themselves; they wished to repeat the feudal system, in which the working people are merely tenants dependent upon the plantation-holders.

But Yankees and Feudalists never agreed, hence the war, which, although never productive of a great deal of bloodshed, was yet full of animosity, and brought great embarrassments upon the early settlers of these two valleys.

The war of the Revolution put an end, of course, to all sectional animosities of this sort; but that war brought itself a burden more intolerable. The English thought proper to make use of savages in this contest, and the inhabitants of Wyoming and Lackawanna Valleys, from their vicinity to the neighborhood of the Six Nations, and the necessary depletion of their strength to meet the demands of Washington's army, were especially vulnerable to attack. This the "British Butler" only knew too well, when, on the last day of June, 1778, he entered the Valley of the Wyoming with four hundred Provincials and six or seven hundred Indians. It was against this army that 300 men had to contend on the fatal 3d of July. The British army at the first took Fort Wintermoot, at the head of the Valley, without opposition. At this crisis the brave little band advanced from Forty Fort to oppose the invaders of their homes. They, too, were led by a Butler. Reaching Fort Wintermoot, they marked off the ground for the battle and took position, their right resting upon a steep bank, and their left extending across the flat to a morass thick with brush-

wood at the base of the mountains. Colonel Butler commanded the right wing and Colonel Denison the left. Said Colonel Butler, "Stand firm the first shock, and the Indians will give way. Every man to his duty." This word Denison repeated on the left. The battle began about four o'clock in the afternoon. As the Yankees fired, and at each fire steadily advanced, the British line was forced to give way. This was in the open ground. The Indian flanking party, however, on the right, caused great annoyance, but it was on the left that the band of savages were principally massed under cover of the wood. There were six of these bands, and the horrid yell of battle was taken up by them each in succession. Soon the Indians had outflanked the left, which was thrown into confusion. A change of front was attempted by Denison, but the order was by some misunderstood as one to retreat, and the confusion was made complete. Butler threw himself between his forces and the enemy, and, riding along the line, cried, "Don't leave me, my children, and the victory is ours." But it was too late. One hundred and sixty of the Connecticut people were killed, and the other one hundred and forty escaped. Many were made prisoners and brutally massacred. Forty Fort was surrendered, and those to whom it had been a place of security were compelled to take their memorable exodus through the "Shades of Death," and eastward over the mountains.

As we move down the Valley, we continually, by many local associations, are painfully reminded of the sad details of this tragedy.

The most prominent natural object of interest in the vicinity of Pittston is Campbell's Ledge. The base of the mountain, of which the ledge is the crowning bluff, is washed on this side by the Susquehanna, and on the other by the Lackawanna River.

In order to reach this ledge we must cross the canal

bridge, and our course is then open to the mountain, which it requires some athletic exertion to climb. One reaches at length the more open woods, and stands upon the brink of the abrupt precipice. The name is said to be derived from a tradition that a Mr. Campbell once leaped off this crag to escape from pursuing Indians. Others think that the name was given in honor of the poet who has made the Valley illustrious through his "Gertrude of Wyoming," though it must be confessed that Campbell knew nothing of the Wyoming of which he wrote.

The view from Campbell's Ledge has this advantage: the two mountain ranges which inclose the valley are both seen at once in their prominence; the whole valley, also, is given in greater completeness than from any other point.

From Pittston we keep the right bank of the river. The Wyoming or North Branch Canal connects Pittston with tide-water. As we advance beyond the town we can see where Fort Wintermoot stood, and a short distance below it, between the site of the fort and the monument, is Queen Esther's Rock, a conglomerate boulder

QUEEN ESTHER'S ROCK.

about a foot and a half high, situated on the brow of a high, steep bank. The rock in one portion is of a reddish color, which the credulous take for the old blood-stain. The Indian queen after whom the rock is named, having lost her son in battle, proceeded, according to custom, after the defeat of the Yankees, to sacrifice to his *manes* about sixteen prisoners, whom with her own hands she beat to death, dashing their brains out with her death-mall, two only of the unfortunate victims escaping to reveal the fate of the rest.

The monument, which has been erected near the old battle-field, is seen near the station called *Wyoming*. It is within the township of Kingston, on the right bank of the river, and rises above the common grave in which the victims of the memorable battle were buried. But how are the brave dead forgotten! The settlers returned to the Valley—returned to their old modes of life, but free from the old perils; they planted in peace along the river that had seen their brothers and fathers bleed, lo[illegible] peace they gathered in their harvests, but, strange as [illegible]v seem, although at an early period after the battle (October of the same year) the bones of the patriots [illegible]een gathered together into one place of sepulture, still [illegible]he time came, and within the limits of two generations, [illegible]hen the burial-place could not be found without great pains of search! In 1832, over half a century after the tragedy had transpired, the first

WYOMING MONUMENT.

steps were taken toward the erection of a suitable monument. On the fifty-fourth anniversary of the battle, a meeting of citizens was held, eloquent addresses were made, and stirring resolutions passed. The grave had been uncovered, and whatever of eloquence there may have been in fractured limbs, and tomahawked and scalped skulls, was brought to bear upon the people to bring them to the "sticking-point"—*i. e.*, to a generous subscription. But so unavailing were all such appeals that for seven years not a stone was touched; the subscription was inadequate. In 1839 it was found necessary to appeal to the distant Legislature of Connecticut for $3000 to aid in the enterprise; but this effort was unsuccessful. Then the ladies took the matter in their own hands, solicited donations and held fairs, and finally succeeded. The monument is sixty-two and a half feet high, and is constructed of granite. Upon three marble slabs are inscriptions, the one in front memorializing the events of the battle, and the other two the names of the fallen, under the Horatian verse,

"Dulce et decorum est pro patria mori."

It is fit that this monument should become the central object of interest in the Valley; it should be surrounded with a very wilderness of flowers, and the surrounding grounds should be made as beautiful as possible.

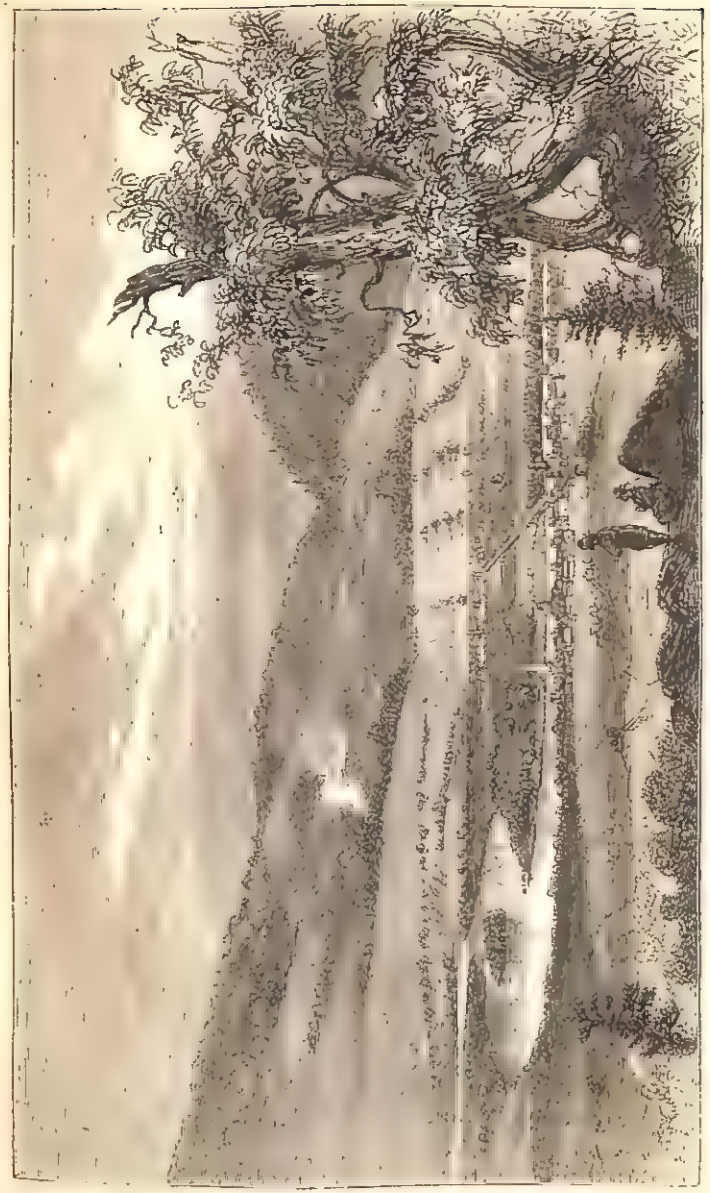
Below the monument, and on the same side of the river, is the site of Forty Fort, where the little village of Troy now stands. The fort was built in 1769 by forty hardy New Englanders, after whom it was named, and was designed to serve the double purpose of security against the Indians and a refuge from the Pennamites. It was from this fort that the brave three hundred marched forth to the disastrous battle of July 3, 1778.

A ride of eight miles from Pittston conducts to the village of

KINGSTON, which is seventeen miles from Scranton. The village is situated on the north bank of the river, and was formerly called Wyoming. It is the shipping place for the coal mined in the neighborhood. In 1857 its population was 2306; but at present, considering the general ratio of increase in the entire population of the Valley, it must be at least 4000. From Kingston the omnibus takes us to

WILKESBARRE, about a mile distant, and upon the opposite side of the river. Wilkesbarre is the shire town of Luzerne County, and lies on the southeast bank of the Susquehanna. It is laid out with a beautiful regularity, and in many respects, especially in its quiet retirement and its historic associations, reminds one of New England villages, such, for instance, as may be found in the vicinity of Deerfield, Massachusetts. But in the mountain scenery with which it is invested it transcends any thing in Massachusetts. The borough occupies an elevated situation, sloping down gently to the river. The county buildings have a prominent location on a public square in the centre of the town. A court-house of more than ordinary pretensions has lately been built; and, in order to complete what has been so well begun toward making this portion of the town attractive, it is only necessary that the grounds should be tastefully laid out in gardens and promenades. Our villages are too serious and glum even in their ornamentation; they ought to show some lighter phases, some likings for flowers and

[illegible] place was first settled under the Susquehanna Land Co[illegible]pany of Connecticut, and was laid out in 1773. So great[illegible] the natural attractions of the town and its commercial [illegible]sts, that the increase in population is remarkably rapi[illegible] In 1840 it was 1718; in 1850 it had increased to 2723; and at the present time it is said to have a population of 6000. This sum includes also the



WYOMING VALLEY, FROM PROSPECT ROCK.

inhabitants of South Wilkesbarre, which is situated further to the south, along the mountain.

Wilkesbarre is in the midst of a productive region of anthracite coal. Above the town there are three collieries, viz., one belonging to the Baltimore Coal Company, one the Black Diamond Colliery, and another called the Hollenback. The Baltimore Colliery has this advantage to the visitor, that he has to descend no shaft, but only to enter a tunnel, through which the mine is easily accessible. Below the town there is the Empire Colliery, and a little lower down, one or two miles south of Wilkesbarre, are Stanton and Co.'s, Blackman's, and the Hartford Collieries. Below these, and nearer the river, are the Consolidated Mines.

The Wyoming, or North Branch Canal, which, as we have said before, extends from Pittston down to tide-water, passes through the borough, and is the important avenue of coal transportation for the mines above-mentioned.

The town contains an anthracite blast furnace, with an annual capacity of 1500 tons, and one of the largest rolling mills in the country, producing annually (in 1857) 3500 tons, besides other manufacturing establishments.

There is also in the rooms of the Historical Society a museum, containing a great variety of curiosities, historical memorials, Indian relics, and collections of coins. For the latter was paid a sum of four or five thousand dollars.

Of course the first visit which the tourist will make will be to Prospect Rock. This rock is up the mountain, directly back of Wilkesbarre. It is about midway down the Valley, and where the latter has its widest reach. It is accessible by means of a carriage to within two hundred yards.

The view from Prospect Rock includes the whole Valley, from Campbell's Ledge to Nanticoke Dam, and it

is said that, on a clear day, even Hyde Park, opposite Scranton, may be clearly seen. The upper portion of the Valley appears an extended plain, while the lower section is undulating and hilly. The entire view is one of more than ordinary beauty, and, once impressed upon the eye, will not soon be forgotten. The quiet valley, cradled in among the mountains; the winding river, dotted with numerous islands, and forming a beautiful link of union between the happy villages that repose upon its banks; the monument, distinctly visible just above Kingston, to the left; and back of all these, the three separate and distinct ranges of the Alleghanies, rising each above the other, one of them near and well defined in outline, another more distant, and above them both a third, which, from its blue tops, seems to look down upon the Wyoming as from some other world.

There is a hotel in the immediate vicinity, affording the best of accommodations to those desiring to make a summer stay among the mountains. The proprietor, Mr. Williams, is anxious to furnish an unexceptionable entertainment to visitors, and, besides the principal hotel, has another building higher up the mountain for the accommodation of travelers.

In the village itself no one will be likely to find a more commodious hotel than the Phœnix, kept by Mr. Gilchrist. The view of the river from this hotel, particularly at sunset, is among the most beautiful that the Susquehanna affords. Turner alone could reproduce the effect of the scene—by which we mean, that the scene is just such a one as Turner, of all artists, would choose to render upon the canvas. Who so well could delineate those delicate hues of sunset that warmly tint the sky above the mountains, and that, mingled with the shadowy reflections of trees and overhanging grasses, are repeated from the river?

The visitor to this portion of the Wyoming Valley

THE SUSQUEHANNA AT WILKESBARRE.

will not find it amiss to take a day's excursion to Harvey's Lake, about twelve miles west of Wilkesbarre, among the mountains which are seen on the west side of the town. A hotel called the Lake House has been built in the vicinity, from which the prospect, including an excellent view of the lake, is very beautiful. About the lake are woodlands which afford covert for deer and other wild game. In fact, Mr. Harvey, after whom it is named, first suspected its presence from the flight in this direction of wild ducks. The lake itself contains the finest fish. In the centre it is thought to be over ninety feet deep, and it is about thirty-four miles in circuit.

Since we are taking the longer route, *vid* Harrisburg, we proceed from Wilkesbarre, on the Lackawanna and Bloomsburg Road, directly down the valley to Northumberland, having the Susquehanna at our left all the way, for which latter reason the traveler will find the left side of the car preferable to the other during this portion of the journey. Three miles below Kingston we come to

Plymouth, which was doubtless so called after the New England village of the same name. It is on the west bank of the river, and is drained by Harvey's and

Tobey's Creeks. It is well timbered, and abounds in coal. Five miles below is

Nanticoke, on the south side of the river. Sixteen miles below Pittston, Nanticoke Dam feeds the North Branch Canal, and the surplus water affords an excellent water-power.

Hunlock's Creek, two miles farther on, is a station of no particular importance; but five miles below Nanticoke we reach

Shickshinny, which is the southeastern limit of the Lackawanna Coal Basin. There is a large furnace near the village of about 2000 tons annual capacity. Here we leave the Wyoming Valley. From this point till we arrive at the junction of the North and West Branches of the Susquehanna, at Sunbury, a distance of nearly fifty miles, we move along a valley, or series of valleys, to which no especial name has been given. During this whole distance there is not much worthy of special notice in any of the stations, with the exception of Danville.

Hicks's Ferry is a station four miles from Shickshinny.

Beach Haven is four miles farther on, and two miles below it is the thriving town of

Berwick, in Columbia County.

Willow Grove lies five miles farther down the river.

Lime Ridge, two miles farther on, is so called from a mountain in its vicinity.

Bloomsburg, the shire town of Columbia County, is fifty-six miles from Scranton, and twenty-four from Northumberland. It is a thriving town, publishing two newspapers.

Rupert, two miles below Bloomsburg, is a lovely village, situated in the midst of the most striking natural scenery. A little below is the junction with the Catawissa Railroad, east and west. The Lackawanna and Bloomsburg Road keeps close to the river to Northumberland, where it connects with the Northern Central, which still follows the river to Harrisburg, and there connects with the Lebanon Valley Railroad, which strikes across the country eastward to Reading; and from thence the East Pennsylvania Railroad leads back toward New York, while the Philadelphia and Reading Railroad conducts to Philadelphia. The Catawissa Railroad route, on the other hand, commencing at Elmira in New York (just above the Pennsylvania border), runs directly southward seventy-eight miles to Williamsport, where it crosses the West Branch of the Susquehanna, along which stream it runs, recrossing it again below Muncy Station, to Milton, twenty-seven miles below, where it leaves the West Branch, and takes a nearly eastward course past Danville to Rupert (where the tourist now is), on the East Branch of the river, which it crosses, moving over the country for fifty miles to Tamaqua. From Tamaqua through Port Clinton, and thence by the Philadelphia and Reading Railroad, is the direct route to Philadelphia, which is 197 miles from Williamsport.

Danville, ten miles below Rupert, is an important town, chiefly noted for its celebrated Montour Iron Works. The country from Rupert to Danville abounds in iron ore, and the scenery is characteristic for boldness.

Danville is the shire town of Montour County, situated on the north bank of the Susquehanna, at the entrance of Mahoning Creek. It is twelve miles above Northumberland, and thirty miles north by east from Harrisburg. A large bridge here crosses the Susquehanna. There are several churches and stores in the town, the population of which in 1850 numbered 3300 inhabitants, and must now be at least double that number. The greater portion of the town lies on ground considerably elevated above the creek, which we have to cross in order to reach the former. A few minutes walk

after crossing brings us along the main street of the town to the Montour House, a commodious hotel. A little farther on is the Union House, from which it is but a step to the bridge across the Susquehanna in the rear of the town. If we cross this bridge we find ourselves in the open country, and, ascending the lofty hills to the right, we get an excellent view of the town and the river.

Now let us retrace our steps to the creek, after recrossing which we find ourselves in the iron part of the town, if we may so call it, for one sees or hears here nothing else than the working of iron. This is the business portion of the town, and here are the great iron-works, the furnaces, and the rolling-mills. If one should lose one's self on this side of the creek at night, he might easily conceive himself in some alien world, where there was nothing known, or wrought, or thought but *iron*. Every minute is told off by an explosive report of red-hot iron just fresh from the puddling furnace. In whatever direction one turns his eye, tall chimneys surround him, surmounted by a crown of lurid flame, suggestive of smelting or melting iron beneath. Let him enter this limb of *Pandemonium*, and he shall find himself in a very wilderness of burning, hissing, cooling iron—iron in every shape and in every attitude—pig-iron, red-hot pig-iron, great crystal boulders of iron, now seen in the furnace, and the next moment riding about in every direction on demoniacal go-carts, now dodging and now chasing one, till one seems to be a great red ball of iron himself!

Passing out of the rolling-mills, which are more extensive than those at Scranton, previously described, and climbing a hill to the right, we find ourselves in the furnaces for smelting the ore. There are several of these. Now we pass out along the sloping hill-side into the dark, where great red-hot, scintillating, exploding iron

stars seem to be forever before our eyes. But we are not yet fairly out of the range of the metal, for, coming and going, we see cart-load after cart-load of melted cinders passing out to be dumped off the hill-side at a little distance from the mills.

In the rolling-mills there are thirty-two single puddling furnaces and twenty-four double ones; there are also ten heating furnaces, and an additional building is being put up which is to contain four more.

In the upper portion of the town there are two blast furnaces, owned by Grove & Co. The distinctive feature which makes these peculiarly attractive to visitors is the arrangement by which the coal and iron ore are elevated from the ground floor to the furnace. Cars filled with coal and iron ore are placed upon a platform large enough to hold four or five cars and as many men, and are literally *blown up* on this platform to the required elevation. The platform rests upon a hollow cylinder of about ten feet diameter, and slides as in a scuttle. The cylinder is immersed in a cistern of water, and by means of a blast of air, which is let in beneath it, is sent up, carrying the platform with it, and is then let down again simply by giving the air thus introduced an escape through an open valve. There is an appearance of elegance about these furnaces which very much enhances the pleasure of the visitor.

From Danville our course lies still along the river, through

Chulasky, a village in Northumberland County, to

NORTHUMBERLAND, eighty miles from Scranton, 167 from Philadelphia, and 223 from New York *vid* Scranton.

There is a romantesque air about this village which is suggestive of the villages which one might meet on the Rhine, or of the cantons of Switzerland. Opportunities of the rarest kind have been afforded the place as regards its business prospects. It is situated at the confluence

of the North and West Branches of the Susquehanna, and over each branch a bridge has been built. From its position, Northumberland has the benefit of the canals, which meet here from the West and the North Branch, and which, from the point of junction, proceed to Havre de Grace at tide-water. It is equally favored as regards railroad communication. And yet, in spite of these advantages, the town is not prominent by reason of any branch of business carried on in it. The most that can be said for it is that it is tastefully laid out; that it is the *beau ideal* of a quiet rural retreat, and for its beautiful natural scenery is hardly to be surpassed.

NORTHUMBERLAND.

The reader has heard of the leaning tower of Pisa in Italy, but very likely he has never heard of the leaning house at Northumberland, which is built upon a ledge of the mountain overlooking the town, and facing the traveler as he passes down the river. Jack ———, who built this house, is said to have been a misanthropic old bachelor, who, by contriving his place of residence so that its toppling appearance might create a sensation of

wholesome fear in the breasts of all intruders, thought to secure himself from the world's troublesome society. There he lives, admitting to confraternity with himself only those choice spirits who can dare to be jolly even in a perpetually-falling house.

X.

SUNBURY TO HARRISBURG.

SUNBURY is about a mile below Northumberland, and is the shire town of Northumberland County. The Pennsylvania Canal is carried across the river by a basin, which the Shamokin Dam produces, 2783 feet long. A branch railroad connects Sunbury with the Shamokin Mines, which are nineteen miles east of the place. A bridge across the North Branch connects the town with Northumberland. It contains a court-house, a stone jail, and several churches. Coal, iron, and limestone are abundant in the vicinity, and there are some manufactures in the village. The population in 1850 was 1217. The railroad communication between Sunbury and Northumberland is by means of the Philadelphia and Erie Railroad.

From Sunbury to Harrisburg is fifty-four miles *vid* the Northern Central Railway. The importance of this road, as establishing communication between Baltimore and the rich products of Northern and Eastern Pennsylvania, can hardly be over-estimated. Like the Susquehanna River along which it extends, it receives tributaries from all parts of the state, until, near the mouth of said river, it reaches the Chesapeake at Baltimore.

Passing *Selins Grove*, an unimportant station, and proceeding nine miles below Sunbury, we come to

TREVORTON JUNCTION, the point of junction with the Trevorton Railroad. This branch road leads to the

mines of the Trevorton Coal Company. There is at this point a bridge across the river to convey the coal to the canal on the opposite side. Trevorton is forty-two miles from Harrisburg.

Georgetown, five miles below the Junction, and thirty-seven from Harrisburg, is an unimportant station near Mahantony Mountain.

Millersburg, nine miles farther on, is on the east bank of the Susquehanna, and at the mouth of Wisconisco Creek, in Dauphin County. It is in the vicinity of Berry Mountain, and is the point of junction with the Lykens Valley Railroad, twenty-two miles in length, connecting with the Franklin, or Lykens Valley Coal Mines.

Halifax, twenty-one miles from Harrisburg, is a post village in Dauphin County, drained by several creeks, which, on the western border of the town, enter the Susquehanna. It is situated in the midst of beautiful scenery, to which the mountains contribute the principal charm. The town has several grist, flour, and saw mills, and tanneries, and its population in 1850 was 2822.

Clark's Ferry is a station fourteen miles above Harrisburg. The river is dammed here to feed the Pennsylvania Canal. On the opposite side is the Susquehanna Canal. At Clark's Ferry we are opposite the mouth of the Juniata River, which is one of the chief affluents of the Susquehanna. This river is formed by the junction of Frankstown and Raystown branches, which rise in the Alleghany ridge, and flows eastwardly to its junction with the Susquehanna, fifteen miles above Harrisburg. Along this river extends the Pennsylvania Central Railroad and the Pennsylvania Canal.

Clark's Ferry is in the vicinity of Peter's Mountain. Indeed, from this point to Harrisburg the Susquehanna makes its way through mountains on each side; the river is very shallow, though of considerable width, and

THE SUSQUEHANNA ABOVE HARRISBURG.

here, as throughout its course, is dotted at frequent intervals with small islands. At the junction of the Juniata with the Susquehanna is

Duncan's Island, now a favorite resort in summer for visitors from Harrisburg. The scenery in this vicinity has all the charming features, heightened to an unusual degree, which make the Susquehanna the most beautiful of American rivers.

Dauphin, eight miles above Harrisburg, is a thriving village, which in 1850 contained a population of 1451 inhabitants. The line of the main division of the Pennsylvania Canal passes through it. Dauphin is situated on the east bank of the river. Here is the junction of the Schuylkill and Susquehanna Railroad from Harrisburg to Auburn.

Leaving Dauphin, we cross the river over the Dauphin Bridge, three quarters of a mile long, and proceed to Marysville, on the west bank. Here is the crossing of the Pennsylvania Central Railway. Near Marysville there is a natural dam, over which the river breaks gently, and here its extreme shallowness is clearly visible.

Fairview is a small village one or two miles above Harrisburg. Here there is a rolling-mill and extensive nail factories. Directly we are at Bridgeport, from which we recross the Susquehanna on the Cumberland Valley Railroad bridge, seven eighths of a mile long, to

Harrisburg, the capital of Pennsylvania. The borough received its name from John Harris, who laid it out in 1785. It became the state capital in 1812.

It is situated on the east bank of the Susquehanna River, which has here great volume, yet is not easily navigable except for rafts, which the current takes down. There are seasons, however, when the freshets give the river a considerable depth. The borough is very conveniently located in respect of canal and railroad communication, and is on this account a flourishing interior

market. It has no less than seventeen churches and mission churches, two public halls, three banks, two anthracite furnaces, two rolling-mills, and a number of founderies and machine shops, among which are those belonging to the Pennsylvania Railroad Company. It has also two female seminaries. The population in 1850 was 8179, but must now number over 16,000.

The borough has a beautiful situation on the banks of the river, inclosed on all sides by mountains, and enjoys the most uninterrupted health. It has in general all the improvements which belong to a great city, together with an excellent police. It is supplied with water through iron pipes from a reservoir on Mount Ayre, into which it is raised from the Susquehanna. This reservoir contains 1,532,195 gallons of water, and cost $120,000. There are several hotels, viz., Jones's, Herr's, Buehler's, the Brady, the Pennsylvania, and the United States.

Harrisburg, as already indicated, is an important railroad centre. Through the mountain passes northward extends the Northern Central Railroad to the great lakes; through these same gaps the Pennsylvania Railroad passes to the mighty West. To the right of these lies the Lebanon Valley Railroad, which, through its important connection with the East Pennsylvania Railroad, conducts directly to New York City; then across the river there is the Cumberland Valley Railroad to Chambersburg; passing down the banks of the river is the continuation of the Northern Central to Baltimore; and to Philadelphia there are two routes, one *vid* Lebanon and Reading, and the other through Columbia and Lancaster.

Capitol Hill is beautifully located on an eminence, the grounds of which have been laid out with great care and taste, and inclosed with an iron fence. The Capitol is an imposing structure, consisting of a main building

and two wings, each adorned with a portico and Doric pillars. The central edifice is 180 feet wide, 80 feet deep, and 100 feet high from the ground to the top of the dome. This building contains the Senate and Representatives' Chambers, the State Library (up stairs), the Supreme Court-rooms, and other apartments for the use of state officers. In the Representatives' Hall is to be seen the chair in which John Hancock sat as president of the Continental Congress. The Senate Chamber has portraits of William Penn, General Washington, Columbus, and Vespucius; also a painting representing the attempt made by the Indians to burn John Harris.

The incident referred to occurred on the river bank below the Railroad Bridge, where may still be seen the tree-stump to which the founder of the town had been tied by the savages, from which horrible situation he was rescued by a tribe from the other side. This stump is the one sole monument and headstone to John Harris's grave, and the people of the borough have surrounded it with an iron railing and a wilderness of flowers.

There is one feature about Harrisburg, Lebanon, and Reading which gives them a novel appearance to a New-Yorker, and that is, the sort of markets which they contain. They stand in the centre of the street, and consist of long covered inclosures open at the sides; and within, the huge blocks upon which the butcher and the dairyman display their tempting meats and fruits form a pleasant picture to look upon.

We ought, before leaving Harrisburg, to say that the rebel invasion of Pennsylvania, which so nearly threatened the town, and the preparations made by the citizens to repel it, the tokens of which will remain for years, will hereafter give an additional interest to the vicinity in the eyes of tourists.

XI.

HARRISBURG TO READING—THE LEBANON VALLEY.

HAVING reached the southern limit of our route, we now turn our faces northward across the Lebanon Valley to Reading, *vid* the Lebanon Valley Railroad. The great feature of the country between Harrisburg and Reading is the extraordinary richness of the soil. A ride of ten miles brings us to

Hummelstown, in Dauphin County, on the Swatara Creek (which empties into the Susquehanna). Its population in 1850 was 620.

Palmyra, six miles farther east, is in Lebanon County. The country is very different from that upon our route hitherto: we have come from coal-fields and mountainous districts into a wide-spread garden of clover and wheat-fields. Through this rich region we proceed ten miles farther, when we reach

LEBANON, the shire town of the county, situated almost exactly half way between Harrisburg and Reading, being twenty-six miles from the former and twenty-eight from the latter. It is drained by the Swatara, is uneven in surface, and very fertile. The county is one of the most productive in the state. Land is nowhere in the town of Lebanon less than from $150 to $200 per acre. The Union Canal passes through the town thirty-eight miles from Middletown, its terminus on the Susquehanna. The town has two furnaces, several stores, besides two large warehouses on the canal. In 1850 the population of the borough was 3000, of the town 7360.

Here the tourist will stop in order to pay a visit to the Cornwall Ore Banks, about seven miles distant, taking for that purpose the North Lebanon Railway.

IRON HILLS AT CORNWALL.

The interesting feature connected with these banks is the vast amount of iron ore lying open to the eye, as in vast heaps purposely piled up by Nature within easy reach of the human hand.

There are three hills, viz., two on the right hand of the railway, as you enter, called the Grassy Hill and the Middle Hill respectively, and another on the left called the Big Hill, from its size. These are made up of solid iron ore, lying millions upon millions of tons in plain sight above the water level. It has been estimated that Big Hill alone contains 40,000,000 tons of iron ore above the surface, a great pile which the eye can take in at a glance, but which, reckoning the ore at the price which it brings as lying in the ground (forty cents per ton), is worth nearly $16,000,000.

For convenience, the ore is mined by terraces, and the ore, after being blasted and broken, is rolled down a slope to cars which convey it to the railway. Considerable amounts of copper have been found mixed with the iron.

If we move up the hill we shall meet a great number of heavy lumber-wagons, filled, as it would seem, with nothing but dirt. It is not dirt, however, but the precious iron ore, which is collected even in these small particles

of dust and shipped to market. Beyond the Ore Banks may be seen an extensive area covered with charcoal pits for the use of the charcoal furnaces near by.

Returning to Lebanon, and continuing our course along the Lebanon Valley, we come to the village of

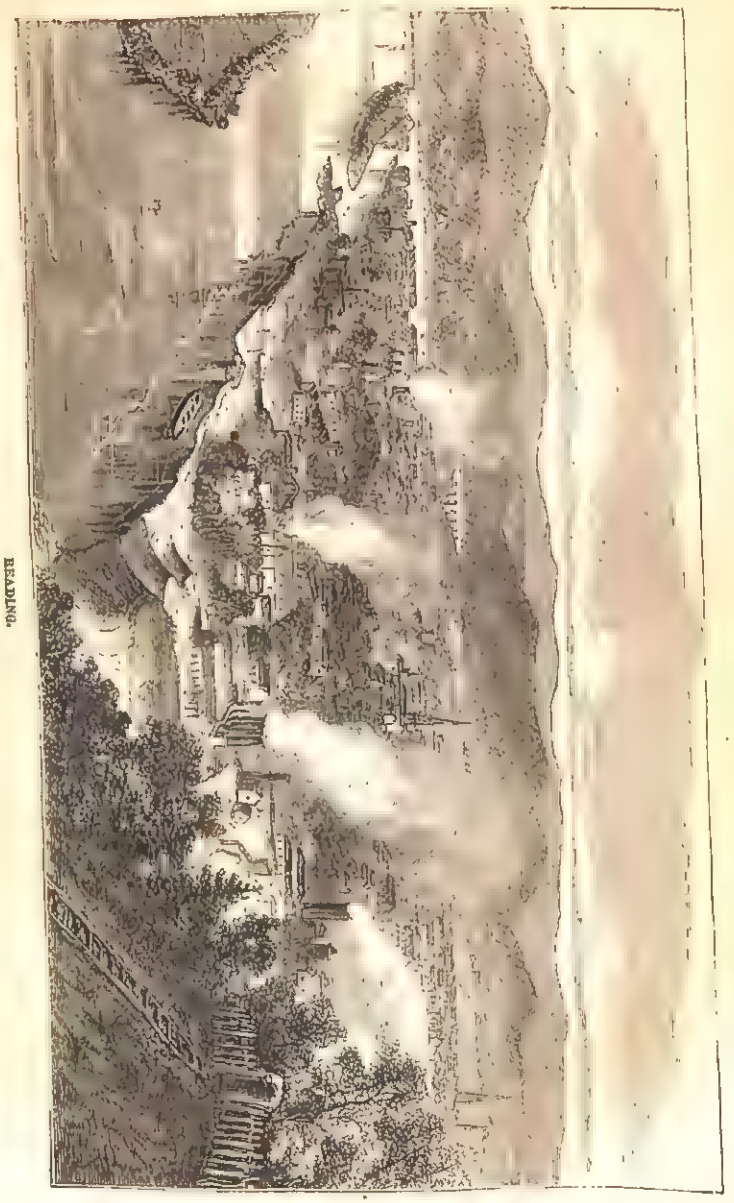
Myerstown, on Tulpehocken Creek and Union Canal, seven miles from Lebanon and thirty-three miles from Harrisburg.

Womelsdorf is in Berks County, on the south side of Tulpehocken Creek, thirty-nine miles from Harrisburg. Its inhabitants are mostly Germans. It is situated in the midst of a finely-cultivated district, and contains several mills and stores. Population in 1850 was 950. A ride of fifteen miles brings us to the city of

READING, the capital of Berks County, situated on the east bank of the Schuylkill, fifty-four miles east of Harrisburg. It was laid out in 1748 by Richard and Thomas Penn, proprietaries of the province, and is therefore one of the oldest towns in the state. It was settled chiefly by Germans, and it has continued mainly German to the present day. The population in 1850 was 15,748, but is now, doubtless, more than 30,000.

The streets are very regularly laid out. The court-house in the central square is 200 feet long by 220 deep, and has a splendid portico, with six columns of red sandstone: its cost was $59,000. There are three public libraries in the town, and thirteen churches.

The position of Reading makes it an active commercial and manufacturing centre. This is in great measure due to its facilities of communication with the interior of the anthracite coal region on the one hand, and with the principal markets along the sea-board on the other. The Schuylkill Navigation Canal, extending from Port Carbon, above Pottsville, to Philadelphia, passes through Reading, and from Reading starts the Union Canal to Middletown, on the Susquehanna. The town lies within



READING.

fifty-eight miles of Philadelphia *viâ* the Philadelphia and Reading Railroad (extending northward to Pottsville), and it is only 127 miles from New York, a half day's ride. Thus in every direction it communicates with perfect ease.

There are various large manufactories in Reading. One anthracite blast furnace has an annual capacity of 3500 tons; two charcoal furnaces have each over 1000 tons capacity; there is a forge, also, of 600 tons, three charcoal forges, two rolling-mills, and, in the days when cotton was king, there was a cotton-mill producing its 8000 yards daily. There are also large flouring-mills, a nail factory, breweries, tanneries, a pottery, lumber-yards, and nearly every species of manufacturing known. White wines are manufactured here, and the manufacture of hats for the Southern and Western markets has been in past years a large business.

The Schuylkill is spanned at Reading by two covered bridges 600 feet long, at a cost of $60,000. A spring on Penn's Mount, the water of which is conducted to a reservoir, and thence distributed over the city in pipes, furnishes a supply of fresh water.

In order to obtain a good view of the city, let one ascend the heights which overlook it, or let him pass through the city up to the Catholic cemetery, from which the view is very beautiful. The town itself, like too many Pennsylvania boroughs, presents to the eye too much red brick, which may be more durable than wood, but it is far from being pleasant to the eye.

XII.

READING TO ALLENTOWN.

THE ride from Reading to Allentown embraces thirty-six miles *vid* the East Pennsylvania Railroad. It leads through a fertile country, which, in respect of its uniform richness of soil, is a fit continuation of that which we have just traversed. The air of a quiet independence broods over the whole country, with its wide-spread acres and its happy farm-houses, from Harrisburg to Easton. The road between Reading and Allentown has only been completed about three years (1863), but already, in the numerous stations which have sprung up along its line, evidence is given of its stimulating influence upon the agricultural population of the valley; and although many of the stations are hardly worthy of an especial notice in this Guide-book, as, for instance, the first three which occur, viz., *Temple's*, five, *Blandon's*, eight, and *Fleetwood*, eleven miles from Reading, still it is to be remembered that they are but the beginnings of future boroughs, which the surrounding agricultural wealth must rapidly nourish into extensive and flourishing communities.

Lyons, fifteen miles from Reading, is a station of greater importance, still, like the others, of recent growth. Passing over the unimportant stations, *Bowers*, sixteen, *Topton*, nineteen, *Shamrock*, twenty-one, and *Millerstown*, twenty-six miles from Reading, we come to

Emmaus, in Lehigh County, thirty miles from Reading. This is a Moravian village at the foot of South Mountain, and built in one street. Like most Moravian towns, it is the namesake of a town in Scripture, as is the case with Bethlehem, Nazareth, and others. The site of the town was bequeathed by two brethren for the support and promotion of missions. The next station is Allentown, on the Lehigh River.

XIII.

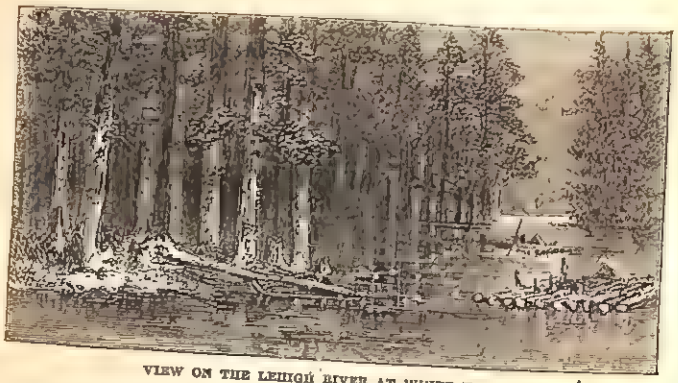
WILKESBARRE TO ALLENTOWN.

INSTEAD of proceeding directly on our way, *vid* Easton, to New York, let us first return to Wilkesbarre, or rather imagine ourselves back at the Phœnix Hotel in that quiet town. We shall then have two courses before us. One of these is that which we have been pursuing, and which, by a circuitous route, has brought us to Allentown. The other, which we are now to take, conducts to the same destination, but over a direct route along the Lehigh Valley.

The Lehigh Valley Railroad Company are constructing a road which shall connect Wilkesbarre directly with their route already completed from Mauch Chunk to Allentown. This branch goes by the name of the Penn Haven and White Haven Railway, and, after ascending and again descending the mountain eastward from Wilkesbarre, strikes the head-waters of the Lehigh. The first station after leaving Wilkesbarre, and about twenty miles from that place, is

WHITE HAVEN. This town is situated on the Lehigh River, twenty-five miles above Mauch Chunk. It was begun in 1835, and received its name from Josiah White. In 1842 it was incorporated as a borough, at which time it had a population of 1500. The lumber business is the most prominent. The Lehigh and Susquehanna Railway, which has its terminus at White Haven, was originally intended for the conveyance of boats from the Susquehanna navigation at Wilkesbarre to that of the Lehigh, but the project was abandoned.

About a mile below White Haven is the tannery of



VIEW ON THE LEHIGH RIVER AT WHITE HAVEN.

Messrs. Smull and Sons, said to be the largest in the United States. The main building is 680 feet long, and the number of sides annually tanned 80,000.

Here we take the Penn Haven and White Haven Railway for Mauch Chunk. Our course lies along the Lehigh River all the way, and runs through a mountainous country, which affords scenery which, in picturesque effect, is without a rival. This is particularly true of that portion of the road which lies just above Mauch Chunk. Just below White Haven we cross the Lehigh, and keep along its left bank until we reach a point midway between Rockport and Penn Haven, where we recross the stream.

Rockport is on the opposite bank from the railroad, thirteen miles above Mauch Chunk. The place has grown up in connection with the operations of the Buck Mountain Coal Company, whose mines are about four miles from the village, at a place called Clifton. Rockport is merely the shipping-point for these mines. The fine mountain air and the picturesque scenery, added to the facility of communication established by the Penn Haven Railroad, will make it a delightful summer resort. Eight miles above Mauch Chunk is the village of

VIEW FROM THE TOP OF BUCK MOUNTAIN.

PENN HAVEN, situated at the junction of Quakake Creek with the Lehigh River. From 1838 to 1852 the Hazleton Railroad Company used the Beaver Meadow Railroad from Hazle Creek to Penn Haven. After the freshet of 1850 they built a separate road to the top of the mountain at Penn Haven, from which the coal cars are let down by inclined planes on the other side, 430 feet high and 1200 feet long, to the Lehigh, where the coal is transferred to boats. The loaded cars, descending, draw up the empty cars. In 1859 another inclined plane was constructed for the purpose of letting down cars to a level with the Beaver Meadow Railroad, over which they are conveyed to the Lehigh Valley Road. The scenery from the head of these planes is magnificent.

From Penn Haven let the reader, before proceeding to Mauch Chank, imagine himself back at White Haven; for, besides the Penn Haven and White Haven Railroad, there is another route, more indirect, but affording features so characteristic that we shall describe it, for the purpose of directing the tourist's attention to this pleasant *detour*. Until the opening of the railroad in 1864 it was the main route, and the only one connecting Mauch Chunk with Wilkesbarre.

From White Haven we have a stage-ride of seven miles in length to

ECKLEY, on the top of Buck Mountain, situated in Foster Township, Luzerne County, and one of the most beautiful mining villages in the state. The site of the village in 1854 was a complete wilderness. The ride up Buck Mountain is one of unsurpassed grandeur, and the most attractive feature connected with it is that the natural scenery which we behold has been, as yet, almost untouched by man. Just as we reach the summit of the mountain, let us turn back to look over the scene which we have left behind us. The valley, down into which we look from a height of 1700 feet above tide-water

level, is just as God made it, the one solitary vestige of human workmanship being the long and winding road over which we have slowly made our way around the sides of the mountain. We will commend the reader to the scene as it has been portrayed by the artist.

Eckley is a very good example of the kind of village which rapidly springs up about mines. Between 1854 and 1860 over 150 tenements, besides five neat cottages, had been built. There were also erected three school-houses, two churches, and a fine hotel. As regards the latter, we have never found, in our travels, a better table set than here, even where we have had to pay twice the sum for our entertainment.

The collieries of Messrs. Sharp and Leisering located here are known as the Council Ridge. The coal mined here is of a superior quality, probably the very best for steam-boat and railroad uses. In opening the mines a point has been selected on what is called the *anticlinal axis* of the two basins, and a slope from this point has been driven north and south into each basin, one breaker sufficing for both slopes. The two basins together are capable of producing 120,000 tons of coal per year.

Leaving Eckley we take the Hazleton Railroad. This road was completed to Weatherly in 1838, where it connected with the Beaver Meadow Railroad. In 1851 the road was continued to Penn Haven, making the whole length fourteen miles. After proceeding a short distance from Eckley we find our direction completely reversed, and ourselves moving back along the edge of Dreck Creek Ledge to

Hazleton, one of the most enterprising towns in the coal region, and situated twenty-three miles above Mauch Chunk, on a ridge which divides the Susquehanna from the Lehigh Basin. The town is of the same elevation as Eckley, which we have just left. Within two miles of the borough there are eleven openings of mines worked

by different companies, which produce about 250,000 tons of coal yearly, which is carried over the Hazleton Railroad to Penn Haven, where it is shipped by canal, or transferred to the Beaver Meadow, and thence to the Lehigh Valley Railroad. These mines were opened in 1837. The town was incorporated in 1857, and contains about 1500 inhabitants, three churches, five schools, four hotels, a brewery, a grist-mill, and the car and machine shops of the Hazleton Railroad and Coal Company. The scenery at this point is remarkably wild and picturesque. From Hazleton we return to

Stockton. Two miles from Hazleton is a small mining village named after Commodore Stockton, of New Jersey. Here are worked the East Sugar-loaf Coal Mines, opened in 1850 by Packer, Carter & Co. They are worked by three slopes, capable each of yielding 50,000 tons per year. The coal is unsurpassed by any other for its excellence. The population is about 1000.

At Hazle Creek we take the Beaver Meadow Railroad, about one and a half miles above Weatherly. The Beaver Meadow Road leads to the celebrated Spring Mountain coal mines in the vicinity of *Jeansville*, whence, from three openings, are sent to market some 150,000 tons per year. In the neighborhood of Jeansville are several mining villages. Passing through *Beaver Meadow*, four miles below Jeansville, the road proceeds to Hazle Creek.

Weatherly is fourteen miles above Mauch Chunk. It contains 600 inhabitants. One mile and a quarter below the village, the Quakake Railroad, thirteen miles long, connects the Beaver Meadow with the Catawissa Railroad. Six miles below Weatherly is the village of Penn Haven, already described. A few miles farther on, the Nesquehoning Valley opens on the right, through which the Nesquehoning Railroad is projected, to develop the mines of the Lehigh Coal and Navigation Company, and

make a connection with the Catawissa Railroad which will shorten the distance some twelve miles. From Penn Haven a ride of eight miles brings us to

Mauch Chunk, the Switzerland of America. The scenery as we approach the town from above baffles description. Rugged mountain spurs, towering above the ordinary level of the ridge, which on either side closes in the Lehigh all along its course, break off abruptly as they reach the river, and we seem to pass between massive mountain colonnades adown the black, hemlock-steeping Lehigh. Sometimes an abrupt turn in the river effects a sudden change as in dissolving panoramic views. Passing at one time, as it would seem, directly into the mountains ahead, we make a rapid curve in the road, and a new picture, in which grandeur and beauty meet, is presented before us. Even the highlands along the Hudson will not compare with these in the matter of picturesqueness.

Through these gateways of natural magnificence we enter the town of Mauch Chunk itself, the capital of Carbon County, and the centre of the Lehigh Coal Basin. It is 89 miles from Philadelphia and 121 from New York.

The town is small in area, and is situated at the junction of Mauch Chunk Creek with Lehigh River, being on all sides surmounted by mountains more than a thousand feet high. The name is Indian, and signifies Bear Mountain.

In 1818 the whole country in this vicinity was a complete wilderness. It was known, indeed, that anthracite coal was to be found here, but every attempt to get it to market had been baffled. In 1817, Josiah White, accompanied by G. F. Hanto, visited this region for the purposes of reconnoissance, the object of which was to ascertain the feasibility of using the Lehigh River to convey the coal to market. The prospect was any thing but encouraging, but it was determined to commence

MAUCH CHUNK FROM MOUNT PISGAH.

operations. Accordingly, roads were made from the mines to the Lehigh, and upon the latter were built a series of dams to aid the navigation by slack water. Thus was established the Lehigh Coal and Navigation Company, with which enterprise the early history of Mauch Chunk is identified.

In 1832 the dependencies of this company gave employment to 400 men, principally miners, who, with their families, made a population of 2000. After passing through many a perilous crisis, and after an expense of two and a half millions of dollars, the enterprise was at last consummated.

In 1830 the population of Mauch Chunk was 700; in 1840, 1200; in 1850, 2557. The principal manufactories of the town are two founderies and machine shops, two iron forges, a screen and wire factory, a wire rope manufactory, a steam flour-mill, three boat-yards, and two shoe factories. Besides these there are the machine and repair shops of the Lehigh Canal and Navigation Company, and the car repair shops of the Lehigh Valley Railroad Company.

The mines, however, constitute the central business concern of Mauch Chunk. One reason why they are to be especially noticed is the excellence of the Lehigh coal, being the hardest anthracite in the world. Besides, every facility is afforded, through the inclined planes and the Gravity and Switch-back Railroad, for visiting the mines, which are readily laid open to the view, being for the most part worked by *slopes*.

The road by which the visitor is carried about the mines, including the whole circuit to Summit Hill, and from thence around among the Parker Creek mines, and back again, *vid* Summit Hill, to Mauch Chunk, is about twenty-five miles in length.

Starting from the Mansion House, we proceed along the main street of the town (and so narrow is the defile

between the mountains that there can be but one street), we pass the court-house and jail at the foot of the hill, and ascend by a wagon road to an elevated *plateau* at the foot of the great plane. In doing so we must pass the beautiful mansion of Judge Packer, with its elegant grounds, laid out by a Parisian refugee, the head gardener of Louis Philippe. You would hardly believe that, four years ago, this rich garden, with its irregularly-beautiful walks and its terraces, the walls of which are formed of conglomerate rock overgrown with myrtle, and its fountains, was but an ordinary barren, rugged hill-slope, like any other which you may now select among the rough mountains on every side. The very soil has been created, the conglomerate rock brought from a great distance, and altogether the old gardener, who a few years ago made his way from Eckley down into the town to solicit an opportunity to labor, has made a fair conquest over Nature, and built himself a monument.

Upon the *plateau* we find that portion of the village situated which is called Upper Mauch Chunk. Here we are 215 feet above the river. At intervals we behold descending the inclined planes before us a train of cars from the mines laden with coal, which pass us by means of shutes extending to the Lehigh River; at the same time, a train of empty cars ascends. The road over which these cars have come was originally a turnpike, and the coal was brought down to Mauch Chunk in wagons drawn by two horses; but the increase in the demand for coal hurried up these operations. The turnpike, under the superintendence of Josiah White, was converted into a railroad, which was the second constructed in the United States (one having previously been laid in Quincy, Mass.). This was accomplished in 1827. During that year 32,074 tons of coal were carried over this road. In 1859 the amount carried was 450,000 tons. Up to 1845 the empty cars were drawn

up the mountain by mules, who were then placed on a train of full cars down, in which they all "took a ride," presenting a very ludicrous sight to the uninitiated stranger.

It was the great desire of Josiah White's latter days, and one which he lived to see realized, to have the cars descend back again into the mines from Summit Hill by gravitation, and then, being drawn up a considerable elevation, to descend again on the other side, by a return track, back to Summit Hill. This is now accomplished by the wonderful contrivance called the switch-back, completed in 1845, which we shall soon explain.

Stepping into a covered car, about one third the size of an ordinary railroad car, with a safety-car attached behind, and signaling to the engineer at the top of the plane, we commence the ascent, being drawn upward as by some magic, but invisible power, into the very clouds. Here, then, we are at the top of Mount Pisgah, having been drawn up the distance of 2332 feet, and being, at the top, nearly 700 feet above the foot of the plane. The novelty of this rare mode of traveling is, however, quite forgotten in the sublimity of the prospect with which the eye, looking from this vast height, is filled. Below us lies Mauch Chunk, which we look upon as a bird or an aëronaut might; towering above it rise the grand spurs of mountains, with the river winding its way among them, and above, range after range, like an aërial flight of stairs, ascend the distant mountain ridges, which, receding farther and farther into the distance as they rise, give us, instead of the contracted view from the foot of the plane, one of the widest reach and magnificence which we have ever seen or shall see ever, though we ascend the White Mountains or the Swiss Alps. Travelers uniformly speak of this view in terms of the greatest enthusiasm, but, after having once seen it ourselves, we can not think them extravagant. The crowning

point of the scene is the Lehigh Water Gap, which above the topmost mountain range lifts its perfectly defined walls, through which a passage is afforded into the unseen valleys beyond.

Now we push ourselves away again, descending for nine miles upon a downward grade, our own weight answering for a locomotive. At first, to the timorous, there comes a suspicion of insecurity; but no one has ever been mortally injured since the road was made, and the break is always sufficient to check the too swift motion of the car. Very soon, though, the novelty and excitement of the ride make us wish that the conductor would put on all the speed in his power. As we glide rapidly around the mountain we have some very beautiful views of the valley beneath us.

In about twenty minutes we reach the foot of a second inclined plane, which draws us up to the very summit of Mount Pisgah, nine miles from Mauch Chunk. This point is called Summit Hill, to the north of which lie the collieries of Panther Creek. Taking an open car, we move on in this direction. But here we are astonished with a second novelty. In order to make the circuit among the mines, and return back again to Summit Hill, it is necessary that the line of direction should be frequently changed. A continuous path, having precisely the slopes required for this change, it would be impossible to find; it is therefore accomplished by taking a zigzag course, which accommodates itself to the nature of the ground. The contrivance for changing the direction of the car at every angle of this zigzag course is called a *switch-back*. The car here, with the impetus which it has gained in descending a given slope, moves part of the way up an eminence, and comes to a standstill. Of course the car must again descend to the foot of this slight eminence, and in so doing it gains an impetus for ascending another slope, on to which it is

moved by a self-regulating *switch*, and this is what is called being *switched back*. The two slopes, together with the eminence, form the letter Y. The arm A is a slope descending toward the base of the letter, this base representing the eminence up which the car is carried, and down which it returns, being then switched off to the arm B, which descends from the eminence. Upon the way an opportunity is given to visit the mines. The coal measures are deeper here than any where else in the country, and are mined at the surface as in a quarry.

By the circuitous switch-back route we have passed from the top of Mount Pisgah back again to one of its bases, where we are now drawn up two inclined planes, and are ready to make the descent back to Mauch Chunk. The ride is all the way among the most romantic woodland scenery, which, connected with the novelty and the swiftness of our movements, is the crowning charm of this strange and delightful route.

From Mauch Chunk our course follows the river down *viâ* the Lehigh Valley Railroad. We now leave the coal region entirely. The first station which is reached is

Lehighton, a small village four miles below Mauch Chunk, and just above the junction of Mahoning Creek with the Lehigh. The old Moravian grave-yard is an object of considerable interest, and, from its lofty situation, commands a favorable view of the Mahoning Valley. At the foot of the hill is the site of Gnadenhutten, which in 1775 was attacked by the Indians, and twelve of the inhabitants massacred. Their remains are laid in the grave-yard above. Opposite Lehighton is

Weissport, on the eastern or left bank of the river. This whole section was originally occupied by Moravians. The village contains an extensive rolling-mill. Fort Allen Hotel rests upon the site of the old Fort Allen,

which was built by Benjamin Franklin; and a well constructed by the same person is still to be seen.

This neighborhood was once the scene of Edward Brainard's missionary labors. The next place on our route is

Parryville, two miles below Weissport, on the eastern bank of the river, near its junction with Big Creek. Here there is an anthracite furnace, erected in 1855, and called the *Poco Poco Iron Works*. Now it is called the Carbon Iron Company, and has a capital of $100,000. The ore used is mostly mined in the vicinity along Stony Ridge. Between Parryville and the Lehigh Water Gap are Breinig & Brother's extensive paint mines for their works at Allentown. The mines produce eleven different colors, equal, it is said, to those which are imported. In our passage to

Lehigh Gap we pass over Lizard Creek, upon which are several mills. The river, by means of the Gap, effects a passage through Blue Mountain. This range now lines the river for several miles on either side, furnishing many very picturesque mountain scenes. Opposite the station a chain bridge crosses the Lehigh.

Slatington, thirteen miles below Mauch Chunk, and thirty-three above Easton, is a beautiful village, occupied chiefly by the Welsh employed in the extensive quarries and factories of the Lehigh Slate Company. This is probably the most extensive slate region in the world. The Capitol at Washington has been roofed with slate from these mines one half an inch in thickness. The village has both a beautiful and healthy location, which has made it attractive to strangers as a place of residence. From the bridge across the river an excellent view is obtained of the Gap, which is two miles above.

Rockdale, four miles farther down the river, and

Laurys, two miles beyond Rockdale, are hardly any thing more than stations. Large quantities of iron ore

are mined in the neighborhood, and sent to different furnaces along the Lehigh. Slate also is extensively mined here. From this beautiful district a ride of two miles brings us to

White Hall, a small village of no great importance. Here are Eckert & Co.'s Hydraulic Cement Works. The cement is mined near by, and is said to equal Rosendale's.

Coplay, two miles below, contains the works of the Lehigh Iron Company, and half a mile below it is

Hokendauqua, a pleasant village on the bank of the river, where are located the Thomas Iron Works, consisting of two furnaces—the largest, and having the most powerful blast machinery in the country, except the works at Bethlehem, mentioned hereafter. The name of the village comes from the creek which here empties into the river.

Through all the places which we have named runs the Lehigh Canal, having its eastern terminus at Easton. The extensive freshet of 1862 materially injured the works, so that above Mauch Chunk its operations have been suspended. It was, indeed, the numerous dams of this canal that gave to this freshet its fearful proportions. These were built at short intervals up to the very source of the Lehigh; and, considering the narrowness of the defile among the mountains which the Lehigh Valley makes, it is easy to conceive the result of an inundation which should break down, one after another, these barriers, thus emptying gigantic floods of water, in swift succession, upon the unfortunate valley below. In an hour's time the river rose to the second story of houses in Mauch Chunk along the stream; and many lives were lost, besides the vast amount of valuable property which was destroyed. In this village of Hokendauqua there is said to have occurred a most marvelous instance of preservation from what seemed the inevitable destruction of

two children. Their father, wishing to remove some valuable property to a place of security, thought his time sufficient to allow of his return before their safety would be at all imperiled; but, on returning, he found that the waters had made access to his house impossible. After the recession of the waters, which was as sudden as their rise, it was found that the flood, entering the house, had floated the bed upon which the little ones were lying, and, raising it to the ceiling, had pressed it upward so closely as, by partial suffocation, to have saved the children even from the touch of the water.

One mile below Hokendauqua is

CATASAUQUA, which is three miles above Allentown. Its population is over 3000, and it contains five iron furnaces belonging to the Lehigh Iron Crane Company. Its position on the railroad and canal, and in the midst of a country rich in iron ore and limestone, is highly favorable to its future growth. The Catasauqua and Fogelsville Railroad here connects with the Lehigh Valley Road. This road was built to reach the iron ore beds belonging to the Lehigh Crane and the Thomas Iron Works. About 150,000 tons of ore are shipped over the road annually. Three miles below Catasauqua, and twenty-nine below Mauch Chunk, we reach Allentown, and are ready to move on, as we should have done by the longer route *vid* Easton to New York.

XIV.

ALLENTOWN TO EASTON.

ALLENTOWN, the capital of Lehigh County, on the Lehigh River. The town was incorporated in 1826. It is situated at the junction of Lehigh River and Little Lehigh Creek, seventeen miles from Easton, sixty from Philadelphia, and ninety-two from New York.

Its name was derived from that of its founder, James Allen, who laid it out in 1762. William Allen, James's father, owned in 1760 three thousand acres of land in the County of Lehigh; this all fell to James, who died in 1777, leaving it to his descendants.

In 1764 there existed thirteen houses, or shanties, in Allentown; the inhabitants were wretchedly off, being mostly Germans. In 1776 there were fifty-four houses, seven of which were taverns. At this time James Allen received ground-rent from seventy-one lots, at the rate of nine shillings sterling for each lot.

It is said that the bells of Christ Church, Philadelphia, when that city was taken by the British in 1777, were brought to Allentown for concealment.

Although laid out a century ago, the town has lost nearly all traces of this antiquity, and looks very much like a modern town. It is built upon elevated ground, commanding an extensive prospect. Its position at the junction of the East Pennsylvania and the Lehigh Valley Railroads is a favorable circumstance for the growth of the place. Its elevated situation, on a sort of promontory which slopes down to Lehigh River and Jordan Creek, was for a time a considerable hinderance to its growth on account of the difficulty of obtaining water; but in 1828 this impediment was removed by the erection of water-works, by means of which the town is supplied with the purest spring water from Worman's Spring, about a mile distant. The water is forced to a height of 160 feet into a reservoir, from which it is distributed over the town. The town is also supplied with gas by the Allen Gas Company.

During the last few years the manufacturing interest has been largely developed. There are fifty-seven manufactories in operation, among which are seven for the manufacture of agricultural implements, two foundery and machine shops, one iron-railing factory, a planing-

mill, a paint factory, five carriage factories, a railroad spike, an axle, a file, and a piano manufactory, two shoe factories, a gun factory, two distilleries, two breweries, four iron furnaces belonging to the Allentown Iron Company, and a rolling-mill. Several other rolling-mills and iron-works are commenced, and more are planned.

The Allentown Iron-works produce 20,000 tons of pig-iron per annum. They are blown by steam, and the ore used is mined in the vicinity. They are situated near the Lehigh Valley Railroad.

The Lehigh River, a tributary of the Delaware, rises in Luzerne County, near Wilkesbarre, and to a short distance below Allentown runs in a southwesterly course, but here it is met by the Lehigh Hills, and compelled to take an easterly course. Before the dams were built in this river it used to abound both in trout and shad.

It may be of interest to state that the old Allen house, or "Trout Hall," as it was called, a hunting-lodge built by William Allen, is still standing. It is a stone cottage, massive enough to stand the brunt of centuries to come. It is too bad to have to reflect, after all, that the old judge was a Tory!

The Lehigh Valley Road continues down the river as far as to Easton. Although we have left the mountain ranges behind us, and can find no scenes so picturesque as those which so frequently occur along the upper basin of the river, yet the eye is every where refreshed with the quiet beauty of the variegated landscape. The country, too, grows richer as we approach the borders of the state.

The only places of prominent interest along the road from this point are Bethlehem and Easton.

Bethlehem, which is five miles below Allentown, is chiefly distinguished as being one of the oldest of the Moravian settlements in this country. The Moravians, as is well known, at first settled in Georgia, and it was

in 1738 that the settlement was broken up in that state (on account of the war raging between England and Spain, in which the Brethren were compelled to serve), and their attention directed to Pennsylvania. The object of the Moravian settlements was the conversion of the Indians to Christianity. The somewhat ascetic life of the Moravians was rather an assistance to them in this sort of enterprise. They hold all property in common; the support of the aged and infirm was made a general concern; and even the regulation of marriages was a matter in which the individuals directly concerned had less to do than any body else.

VIEW AT BETHLEHEM.

The settlement at Bethlehem, which was the earliest in Pennsylvania, retained its original economy and regimen longer than any other. This is due to the outward pressure which was continually brought to bear against it. The Germans and Irish both looked upon a Herrnhutter with the extremest contempt; the union, therefore, between the Brethren themselves was confirmed and strengthened. The separation of the sexes and the community in property existed as late as 1762. From

this date the distinctive characteristics of the Moravians have more and more ceased to be noticeable.

The old buildings, though, for the most part, still remain, and afford the tourist objects of curious interest. The most important of these are situated in Church Row, which is at the foot of the street leading to the Sun Hotel. The buildings are built of stone, and suggest great possibilities of endurance for generations yet to come. Here the infirm and the aged are still supported by the Brethren as of old.

The old grave-yard of the Moravians will well repay the tourist for the trouble of visiting it. It is in the centre of the town, and is full of graves. It is interesting to walk through between the long rows of stones which lie as a cover upon the old graves, and to decipher their inscriptions, which oftentimes it is difficult to make out; besides that, the grass overgrows and veils them from inquisitive eyes. Here are none of the discriminations of fashionable life. Indians, negroes, and white men are laid side by side, and their ashes mingle together. That love which led the followers of Zinzendorf across the sea to enlighten the mind of the poor Indian, still holds him in spite of the chains of death. From all parts of the world has the human dust of this cemetery been gathered. Here, for instance, are three graves side by side; one of them owes its burden to London, another to the province of Silesia, and the third to Herrnhutt.

The town is very regularly laid out, and a pleasant feature connected with it is the abundance of shade-trees. Considerable of the historic interest belonging to the town is due to the fact that Washington, in his retreat across the Delaware, was compelled to remove his hospital and supplies to Bethlehem. The Brethren gave up their buildings to the government, and on one occasion these were occupied by a large body of British prisoners. In this way the town came to be honored by many

distinguished heroes of that day, e. g., Washington, Adams, Lafayette, Pulaski, Gates, Hancock, and Franklin. The single sisters gave Count Pulaski a banner of crimson silk, embroidered, which is now in the Historical Society's rooms at Baltimore. Longfellow has made the incident the subject of a poem.

The borough has over 5000 inhabitants, having more than doubled its population since 1845. The North Pennsylvania Railroad has here its northern *terminus*, forty-five miles from Philadelphia; and from the latter city this road is the most direct route to the Lehigh Valley.

Bethlehem lies within the celebrated "Walking Purchase." By a treaty with the Indians, made between them and John and Thomas Reenan in 1737, it was stipulated that the purchase of land should be consummated by commencing near where Wrightstown now stands, and terminating at the spot which a person could reach in one and a half days' walk. This walk reached seventy-four miles—not an extraordinary distance, certainly, yet one which aggravated the Indians. This had much to do with the Indian wars in this state.

The Bethlehem Iron Company's Works deserve especial mention, inasmuch as they are the finest in the whole valley—a valley celebrated for its extensive iron factories.

Two miles from Bethlehem is

Freemansburg, a village which owes its growth chiefly to the Lehigh Canal. There are here quite extensive boat-building establishments. The town contains about 200 inhabitants. A ride of ten miles brings us to

EASTON, seventy-five miles from New York, where the Lehigh joins the Delaware.

The site of the town is the result of the *débris* which the waters of the Lehigh, Delaware, and Bushkill have washed down and lodged in this situation. In digging

wells abundant evidence is furnished of this sort of formation, trees and conglomerate rock being found at the depth of thirty feet beneath the surface of the present soil. Yet this site, thus produced, seems to be too limited in area for the demands of the town, which has literally climbed up and over the ranges of hills which hem it in on every side.

The town was laid out in 1750, and is one of the oldest boroughs in the state. It has very much the appearance of a city, its streets being laid out at right angles, and either paved or macadamized. The borough is lighted by gas, and there is an elaborate system of sewerage. Generally, the houses are of brick, which is of the most excellent quality as regards durability. The court-house is or was (for a summer or two since it was pulled down) situated in the centre of the public square, and there used to be connected with it a pillory and a whipping-post, as late even as 1790.

Lafayette College is situated on a beautiful eminence overlooking the town from the north. The view from this point is an excellent one; yet, as is true of all the hills about Easton, not more than one third of the town can be seen from it.

Bushkill Creek affords good water-powers, and it is to this that a great measure of the prosperity of the town is to be attributed. Over a dozen mills and distilleries lie upon the banks of this creek within the limits of the town. The distilleries consume about 250,000 bushels of grain yearly, and send to market 900,000 gallons of whisky.

The facilities of the borough for communication are excellent and numerous. The Central Railroad of New Jersey has here its western *terminus;* the Morris Canal to New York, the Belvidere-Delaware Railroad and Delaware Canal to Philadelphia, and the Lehigh Valley Road and Lehigh Canal to Mauch Chunk, all centre here.

EASTON.

The dépôt of the Lehigh Valley and Central Railroads is located in the extreme eastern portion of the town, and on the opposite side of the river. A novel feature about it is that it has two stories: the upper one, which is a passenger dépôt, on a level with the Central Railroad of New Jersey, and the lower, a freight dépôt, on a level with the Belvidere-Delaware Railroad. About half a mile farther up in the town the two roads meet on a common level. From the passenger dépôt just referred to the view of Easton is probably as good as can be obtained. To the right, but hidden from us by hills, is Phillipsburg, on the New Jersey side of the Delaware; directly opposite is Mount Lafayette, with the college; farther to the left is Mount Jefferson, upon which is the old cemetery in which Squire Parsons, the patron of the town, is buried; at the foot, along the sides, and over the summits of these hills reaches the thriving town itself, with its busy manufactories, but with an antiquated look about it such as belongs to all the old German boroughs; while at our feet rolls the Lehigh, which just below joins the stately Delaware. It needs only the sunset—which once we remember to have seen over the western hill—to give the scene its perfectness of matchless beauty.

Among the principal manufactories of South Easton, on the southern bank of the Lehigh, we may mention the following, viz., the rolling-mill and wire manufactory of Stewart & Co., from which 1200 to 1400 tons of iron and copper wire are annually sent to market, realizing from $175,000 to $200,000; the Lehigh Cotton Factory, turning off, in favorable times, 3000 yards per day; the Franklin Iron Works, which, besides the regular foundery business, manufacture also nearly every sort of agricultural implement used; the South Easton Iron and Brass Foundery, erected in 1857; and a blast furnace producing about twenty-five tons per week, and belong-

ing to Charles Jackson, Jr., who also owns the Glendon Works, two miles above Easton, on the river.

XV.

EASTON TO NEW YORK.

LEAVING the Lehigh Valley behind us, we now take again the cars of the Central Railroad of New Jersey for New York. Just over the river from Easton we find ourselves in Phillipsburg, situated on the banks of the Delaware, and one of the largest towns in Warren County. Here we have the junction of the Central with the Lehigh Valley and Belvidere-Delaware Roads, and the western termination of the Morris Canal from New York.

PHILLIPSBURG is an older borough than Easton, but it made slow progress previous to the construction of the Central Road. The principal manufactories are the Warren Foundery and Machine Company, Tindall's Distillery, and the Cooper Iron Furnace. The ore used in the latter is got from the Andover mines, in Sussex County, New Jersey, and is considered superior to almost any other.

The borough presents a very charming appearance from its numerous cottages and villas.

Springtown, five miles from Phillipsburg, and sixty-eight from New York, is a town of no great importance. Our course to the Junction passes through the Musconetcong Valley, and on the way we pass three stations, viz.,

Bloomsbury, *Valley*, and *Asbury*, neither of which contains any thing of especial and noteworthy importance. The first is sixty-eight miles, the second sixty-five, and the third sixty-three from New York.

The Valley is one of the richest agricultural regions in the country, and the landscape scenery is, for its kind, very attractive. We have already, in the proper place, spoken of this valley, which we leave at *Hampton Junction*, whence our route to New York also has already been made familiar to the reader.

XVI.

CONCLUSION.

WE have nothing farther to add. Our design has been mainly to give valuable *information* to the traveler. Natural scenery it has only been possible to indicate in its general features; in its details it is only to be appreciated by the on-looking eye. If this guide-book has given the reader a good idea of the natural resources of the country included within its scope, or the important connection between these resources and railroad communications, and if it has clearly indicated to the tourist the prominent objects of interest along the route which will repay him for the pains of visiting, then we have accomplished the purpose with which we set out. An exhaustive guide-book was clearly impossible within any proper limits; and, besides that, in order to its permanent usefulness, it was necessary that a book of this nature should confine itself, in the main, to those features which always remain the same, rather than to such as are continually fluctuating.

New York City is the metropolis of the railroads of this country, the *emboüchure* of the great streams of our land commerce. Among these streams the Central Railroad of New Jersey, taken together with its main connections, must forever stand as the Mississippi. Its great northern tributary, the Lackawanna Road, continued from Great Bend to Oswego, on Lake Ontario, by means of the Syracuse and Binghamton Railroad, bisects the

Empire State. Its great western affluent—the Lehigh Valley Road—through the Catawissa and the Sunbury and Erie Roads, crosses both branches of the Susquehanna, and extends entirely through Western New York to Lake Erie, and from Allentown, *viâ* Harrisburg and Pittsburg, it crosses the Ohio to the Far West. These tributaries pass directly through the coal-fields, beyond which they widen out toward the Great Lakes, thus bringing to our Eastern market not merely the anthracite from this side of the Susquehanna, but the bituminous coal beyond, in addition to the abundant cereals of the Mississippi Valley. There is, either on the Central Road or its connections, no Niagara Falls, with its Suspension Bridge, nor any Hoosick Tunnel, but, as is rarely found to so great an extent on other commercial routes, there is at every step an object of interest to the tourist, something beautiful or picturesque for the eye, something novel in the work of locomotion, or some section, like the Valley of Wyoming, crowded with historic associations.

ITINERARY OF THE ROUTES DESCRIBED.

I. New York to Wilkesbarre.—Starting from Jersey City at 8 A.M., the tourist will reach Hampton Junction, 60 miles distant, at 11 o'clock, which is the only time when it is possible to secure a connection with the Delaware, Lackawanna, and Western Railroad. Immediately availing himself of this connection, he reaches the Water Gap, 26 miles beyond, at 1 P.M. Supposing him to stop over at the Gap for one night, he will resume his journey at 1 o'clock the next day to Scranton, 57 miles farther to the northwest. Stopping at Scranton overnight, the next morning he takes the 10 o'clock train for Kingston, 17 miles distant, on the Lackawanna and Bloomsburg Railroad, from which point he is taken by stage to Wilkesbarre, about a mile from the station, arriving there about 3 o'clock P.M. The trip to Prospect Rock, 3 miles to the east of the town, may be, with the exception of the last 200 yards, taken by carriage. The tourist will stop at Wilkesbarre overnight.

II. From Wilkesbarre to Harrisburg.—The tourist who takes the longer of the two routes which we have described in the foregoing pages will leave Wilkesbarre at 9 A.M. of the fourth day, reaching Danville, 50 miles farther down the valley, at noon. Stopping over for a day—as he must, if he stop at all—he will reach Northumberland, 12 miles distant, at 1 the next day. From this point, at 10 o'clock of the following day (the fifth), he proceeds 53 miles to Harrisburg over the Northern Central Railroad, arriving at 1 P.M. If he stays at Harrisburg overnight, he will proceed at 8 A.M. on the following day to Lebanon, 26 miles distant, which he will reach a little after 9. After making a visit to the Cornwall Ore Banks by a special railway accommodation, he will take the 3 P.M. train for Reading, 28 miles from Lebanon. From Reading he may immediately proceed to Allentown, *via* East Pennsylvania Railroad, over a distance of 36 miles. The next morning, at 5 30 A.M., he starts for Bethlehem, about fifteen minutes' ride over the Lehigh Valley Railroad; stopping at which point till 1 P.M., he moves on to Easton, 12 miles farther down the Lehigh River. He will then have five hours at Easton before taking the 6 30 P.M. train, *via* Central Railroad of New Jersey, to New York—a distance of 75 miles.

The route thus described from New York and back takes one week, and traverses 457 miles, giving time for examining the more important objects of interest, though there are several points where an additional day may be pleasantly spent.

III. WILKESBARRE TO MAUCH CHUNK.—Supposing the tourist to prefer the shorter of our tours from Wilkesbarre, on the morning of the fourth day, instead of pursuing his course down the Wyoming Valley, he will proceed by stage from Wilkesbarre at 7 30 A.M. to the dépôt of the Lehigh and Susquehanna Railroad, 5 miles up the mountain. At White Haven, taking the stage to Eckley, he arrives about noon, proceeding thence directly by Hazleton Railroad to Beaver Meadow Junction, where he will take the Beaver Meadow Railroad to Mauch Chunk, arriving there about the middle of the afternoon. The next morning he will take the trip over the Gravity Roads and Switch-back, starting at 8 A.M., and returning in time for the Lehigh Valley 4 o'clock train to Allentown, 29 miles from Mauch Chunk. Thence his course to New York will be the same as by the longer route.

THE END.